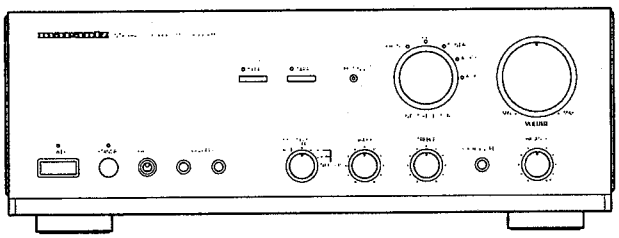
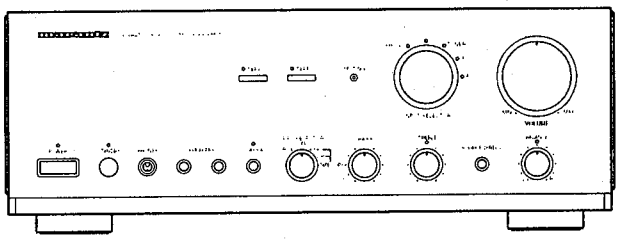
Service Manual

74 PM68 / PM78 /02B/ 02G
PM-68 / PM-78 /FB/ FN
PM-68 /UBL
Integrated stereo amplifier





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Please use this service manual with referring to the user guide (D.F.U)without fail.
修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行ってください。

marantz®

Model PM-68 / PM-78

PCS 98 228

4822 725 51168
First issue 1998.01
214W855010 ACT

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

USA

MARANTZ AMERICA, INC.
440 MEDINAH ROAD
ROSELLE, ILLINOIS 60172- 2330
USA
PHONE : 630 - 307 - 3100
FAX : 630 - 307 - 2687

CANADA

LENBROOK INDUSTRIES LIMITED
633 GRANITE COURT,
PICKERING, ONTARIO L1W 3K1
CANADA
PHONE : 416-831-6333
FAX : 416-831-6936

EUROPE

MARANTZ EUROPE B.V.
P.O.BOX 80002
BUILDING SFF2
5600 JB EINDHOVEN
THE NETHERLANDS
PHONE : +31 - 40 - 2732241
FAX : +31 - 40 - 2735578

PROFESSIONAL **USA**

SUPERSCOPE TECHNOLOGIES, INC.
MARANTZ PROFESSIONAL PRODUCTS
1000 CORPORATE BLVD., SUITE D
AURORA, ILLINOIS 60504 USA
PHONE : 630 - 820 - 4800
FAX : 630 - 820 - 8103

PROFESSIONAL **CANADA**

TC ELECTRONICS CANADA LTD.
540 FIRING AVE.
BAIE D'URFÉ, QUEBEC H9X 3T2
CANADA
PHONE : 514 - 457 - 4044
FAX : 514 - 457 - 5524

TRADING

MARANTZ EUROPE B.V.
P.O,BOX 80002
BUILDING SFF2
5600 JB EINDHOVEN
THE NETHERLANDS
PHONE : +31 - 40 - 2732241
FAX : +31 - 40 - 2735578

BRAZIL

MARANTZ BRAZIL
Caixa Postal 21462
CEP 04698-970
Sao Paulo, SP, BRAZIL
PHONE : 0800 - 123123 (Discagem Direta Gratuita)
FAX : +55 11 534. 8988

THAILAND

MRZ STANDARD CO., LTD.
746 - 750 WANGBURAPA BANGKOK
10200 THAILAND
PHONE : +66 2222 9181
FAX : +66 2225 8871

HONG KONG

FORWARD INTERNATIONAL CORP.LTD.
15 TH FLOOR, REGENT CENTRE,
88 QUEEN'S ROAD, CENTRAL, H. K,
PHONE : +852 521 - 0883
FAX : +852 521 - 7835

TAIWAN

PAI-YUING CO., LTD.
6 TH FL NO, 148 SUNG KIANG ROAD,
TAIPEI, 10429, TAIWAN R.O.C.
PHONE : +886 (2) 5221304 - 8
FAX : +886 (2) 5630415

MALAYSIA

WO KEE HONG ELECTRONICS SDN. BHD.
NO. I 02 JALAN SS 21/35, DAMANSARA
UTAMA, 47400 PETALING JAYA
SELANGOR DARUL EHSAN,
MALAYSIA
PHONE : +60 3 - 7184666
FAX : +60 3 - 7173828

JAPAN *Technical*

MARANTZ JAPAN INC.
35- I , 7- chome, Sagamiono
Sagamihara - shi, Kanagawa
Japan
PHONE : +81 427 44 7950
FAX : +81 427 48 0889

日本マランツ株式会社

本　社 〒228
神奈川県相模原市相模大野 7 - 35 - 1
営業本部 〒150
東京都渋谷区恵比寿南 1 - 11 - 9

SINGAPORE

FORWARD MARKETING (SINGAPORE) PTE. LTD.
29, LENG KEE ROAD
SINGAPORE I 59099,
PHONE : +65 475 - 4555
FAX : +65 475 - 8623

SHOCK, FIRE HAZARD SERVICE TEST :

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard N0. 1492.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

970926ACT

1. SPECIFICATIONS

Power output (class AB operation)

RMS 8ohms (20 Hz -20 kHz) 95W
DIN 8 ohms .. 105W
THD at 8 ohms RMS rated output 0.03%
Damping factor 150

Power out put (PM-78 classA operation)

RMS 8 ohms (20 Hz-20 kHz) ..... 25 W
DIN 8 ohms .. 28 W
THD at 8 ohms RMS. rated output 0.03%
Damping factor 150

IHF dynamic power (class AB operation)

8 ohms /4 ohms /2 ohms ..... 120 / 185 / 220 W

IHF dynamic power (PM-78 class A operation)

8 ohms/4 ohms/2 ohms ..... 35 / 45 / 50 W

Magnetic cartridge input (MM)

input sensitivity impedance ..... 2.5 mV/ 47 kOhms
Accuracy of frequency response to IEC RIAA ..... 0.5 dB
Signal to noise ratio ..... 85 dB

Tuner/CD/Aux/Tape inputs

input sensitivity impedance ..... 150 mV / 40 kOhms
Signal to noise ratio 88dB
Frequency response
(-1 dB limits, Source Direct) ..... 10 Hz - 65 kHz
Tone characteristic (100 Hz and 10 kHz) ..... ± 8 dB
Channel separation
(1 kHz/10 kHz, Source direct) ..... > 80 / > 70 dB

General

Power Requirements

/02 versions ..... 230 V AC,50 Hz
U versions ..... 120 V AC,60 Hz

Dimensions

Width ..... 439 mm
Height ..... 159 mm
Depth ..... 375 mm

Weight

Unit alone ..... 12.3 kg

Specifications subject to change without prior notice

定格出力（20 Hz - 20 kHz 両チャンネル同時駆動）
クラスAB ..... 100 W x 2 （8 Ω 負荷）
クラスA（PM-78のみ） ..... 25 W x 2 （8 Ω 負荷）
ダイナミックパワー
クラスAB ..... 150 W x 2 （6 Ω 負荷）
190 W x 2 （4 Ω 負荷）
220 W x 2 （2 Ω 負荷）
全高周波歪率(20 Hz - 20 kHz, 10 W出力時8 Ω負荷)
クラスAB 0.015
クラスA （PM-78のみ） ..... 0.010 %
混変調歪率（SMPTE） ..... 0.015 %
出力帯域幅（8 Ω負荷,0.08%歪率） ..... 10 Hz - 80 kHz
周波数特性
(CD,ソースダイレクト) ..... 10 Hz - 50 kHz + 0 dB -1 dB
ダンピングファクター（8 Ω負荷,100 Hz - 10 kHz） 130
入力感度／入力インピーダンス
PHONO（MM） ..... 2.5 mV/47 k Ω
HIGH LEVEL ..... 150 mV/40 k Ω
PHONO最大許容入力（1 kHz）
(MM) ..... 150 mV
RIAA偏差（20 Hz） ..... - 2 dB
(40 Hz - 20 kHz) ..... ± 0.5 dB
S/N比（IHF、Aネットワーク,入力ショート）
PHONO（MM） ..... 85 dB
HIGH LEVEL ..... 109 dB
トーンコントロール
BASS（100 Hz） ..... ± 8 dB
TREBLE（10 kHz） ..... ± 8 dB
電源電圧 ..... AC 100 V, 50 Hz/60 Hz
消費電力（電気用品取締法） ..... 160 W
最大外形寸法
幅 ..... 439 mm
高さ ..... 156 mm
奥行き ..... 375 mm
質量 ..... 12.3 kg
付属品
リモートコントロール送信機（RC-68PM） ..... 1 台

本機の規格および外観は改良のため予告なく変更することがあります。

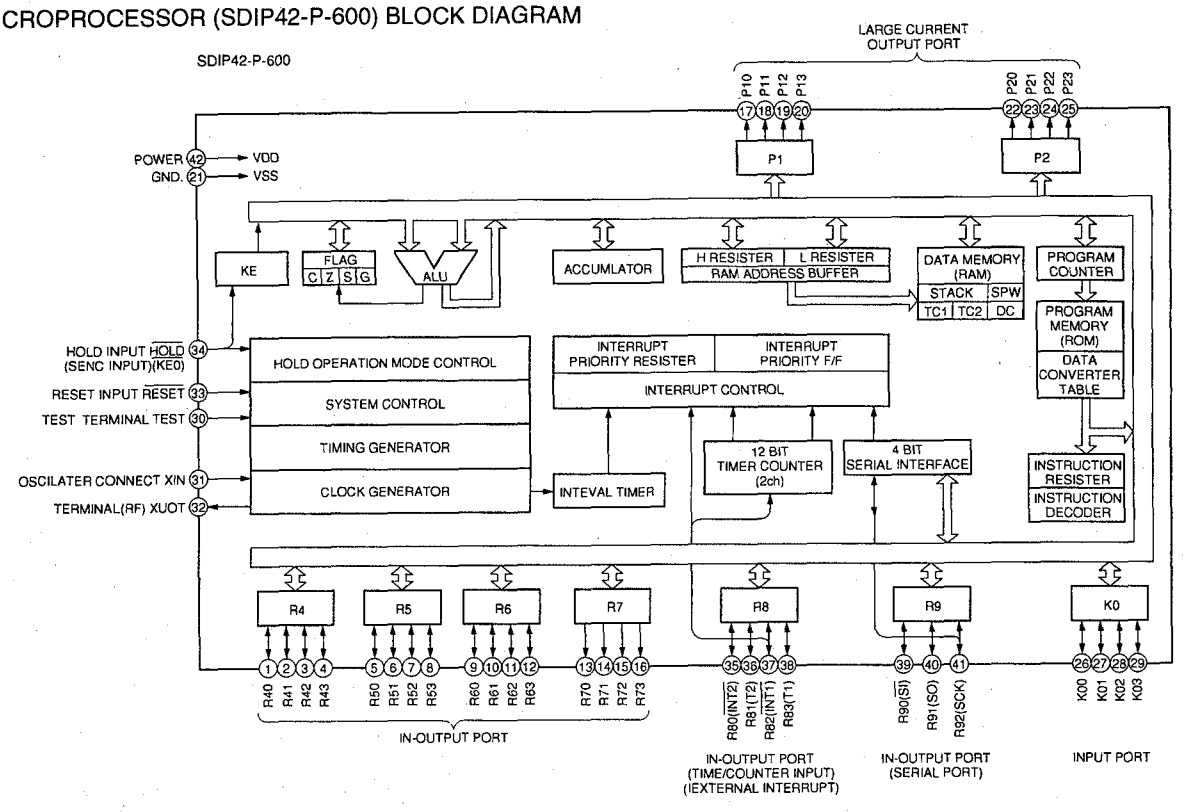
2. TEST EQUIPMENT REQUIRED SERVICING

Item	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
AC VTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
DC VTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors of primary voltage to amplifier
Variable Autotransformer	Adjust level of primary voltage to amplifier
Circuit Tester	Trouble shooting
Shortting Plug	Shorts amplifier input to eliminate noise pickup

項　目	使　用　方　法
歪　率　計	歪の測定
低周波発振器	正弦波および矩型波の信号源
ＡＣ　ＶＴＶＭ	交流電圧の測定
オシロスコープ	波計分析、トラブルシューティングおよびASOの調整
ＤＣ　ＶＴＶＭ	直流電圧の測定
交流ワットメーター	アンプの一次側消費電力のモニター
電源電圧計	アンプの一次側電圧のモニター
スライダック	アンプの一次側電圧の調整
テ　ス　タ　ー	トラブルシューティング
ショート用プラグ	雑音を拾わないようにアンプ入力を短絡する

3. IC INFORMATIONS

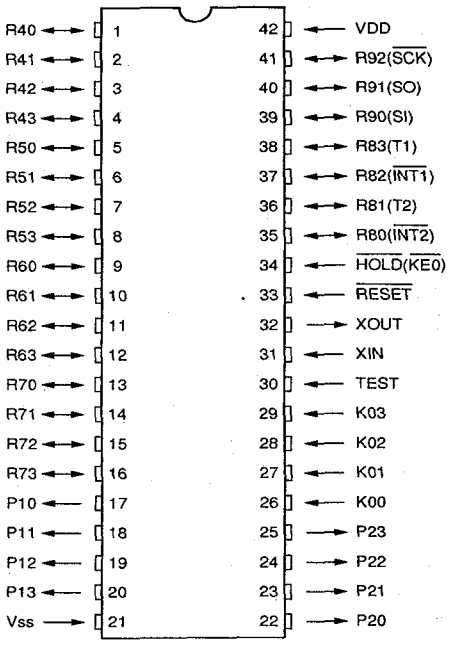
MICROPROCESSOR (SDIP42-P-600) BLOCK DIAGRAM



PIN no.	PORT NAME		ACT	FUNCTION
1	R40	MMUT	H	MANUAL MUTE SIGNAL MUTE
2	R41	FMUT	L	SIGNAL(SOURCE/MONITOR SWITCH)
3	R42	VOUP	L	MOTOR DRIVE VOLUME UP
4	R43	VODW	L	MOTOR DRIVE VOLUME DOWN
5	R50	T3K	L	MONITOR INPUT SWITCH (TAPE3)
6	R51	T2K	L	MONITOR INPUT SWITCH (TAPE2)
7	R52	T1K	L	MONITOR INPUT SWITCH (TAPE1)
8	R53	AX2K	L	SOURCE INPUT SWITCH (AUX2)
9	R60	AX1K	L	SOURCE INPUT SWITCH (AUX1)
10	R61	TUNK	L	SOURCE INPUT SWITCH (TUNER)
11	R62	CDK	L	SOURCE INPUT SWITCH (CD)
12	R63	PHOK	L	SOURCE INPUT SWITCH (PHONO)
13	R70	LSTB	L	LED INDICATOR STAND BY DISPLAY
14	R71	LMUT	L	LED INDICATOR MUTE DISPLAY
15	R72	LPRO	L	LED INDICATOR PROCESSOR DISPLAY
16	R73	LTP3	L	LED INDICATOR TAPE3 DISPLAY
17	P10	LTP2	L	LED INDICATOR TAPE2 DISPLAY
18	P11	LTP1	L	LED INDICATOR TAPE1 DISPLAY
19	P12	LSOU	L	LED INDICATOR SOURCE DISPLAY
20	P13	LAX2	L	LED INDICATOR AUX2 DISPLAY
21	VSS			GND.
22	P20	LAX1	L	LED INDICATOR AUX1 DISPLAY
23	P21	LTUN	L	LED INDICATOR TUNER DISPLAY
24	P22	LECD	L	LED INDICATOR CD DISPLAY
25	P23	LPHO	L	LED INDICATOR PHONO DISPLAY
26	K00	1RS	L	SOURCE INPUT SWITCH(ROTARY ENCODER) bit1
27	K01	2RS	L	SOURCE INPUT SWITCH(ROTARY ENCODER) bit2
28	K02	PRK	L	PROCESSOR IN-OUT SWITCH
29	K03	MUK	L	MANUAL MUTE
30	TEST			NOT USED (GND)
31	XIN			CLOCK 4.00 MHz (IN)
32	XOUT			CLOCK 4.00 MHz (OUT)
33	RESET	RES	L	SYSTEM RESET
34	HOLD	PDW	L	POWER DOWN CHECK
35	R80	RXRC	L	REMOTE CONTROL INPUT (RC-5)
36	R81	EN1		MODEL SELECT 1
37	R82	EN2		MODEL SELECT 2
38	R83	EN3		MODEL SELECT 3
39	R90	TXRC	L	SERIAL DATA(RC-5 REMOTE CONTROL)
40	R91	ENTX	L	ENABLE (REMOTE CONTROL)
41	R92	RELY	L	STAND-BY RELAY CONTROL
42	VDD			POWER SUPPLY

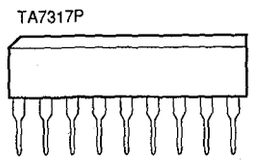
MICROPROCESSOR (SDIP42-P-600)
Position NO.7401

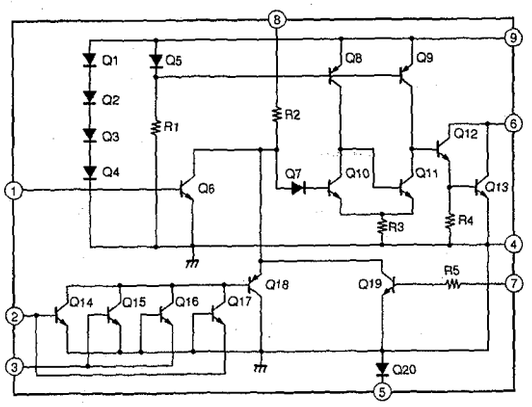
SDIP42-P-600

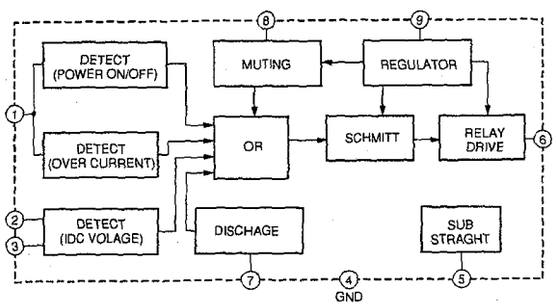


TA7317P (Position NO.7290)

TA7317P

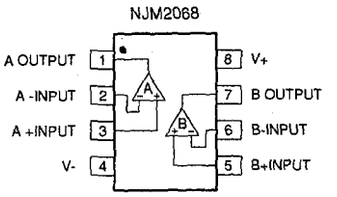




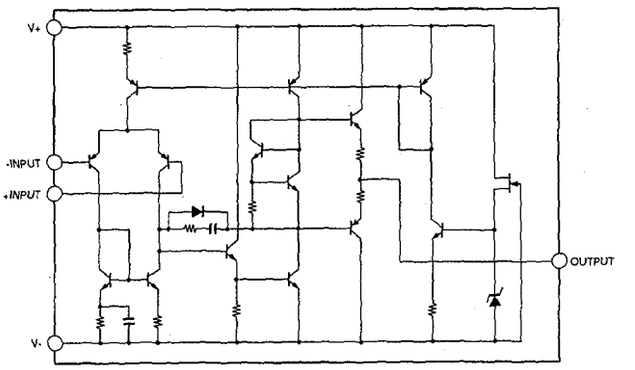


NJM2068 (Position NO.7501,7502,7503)

NJM2068

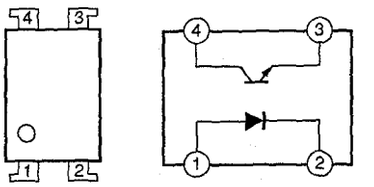


NJM2068



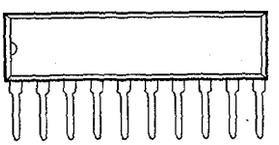
PC817 (Position NO.7269,7270)

PC817

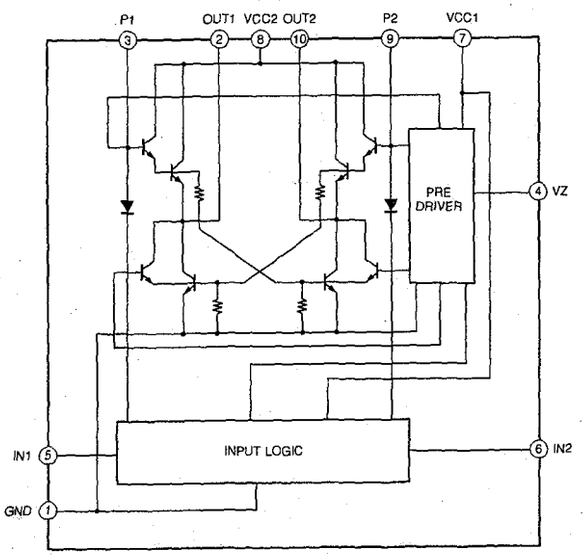


LB1641(Position NO.7402)

LB1641

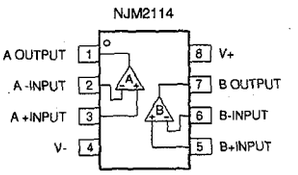


LB1641

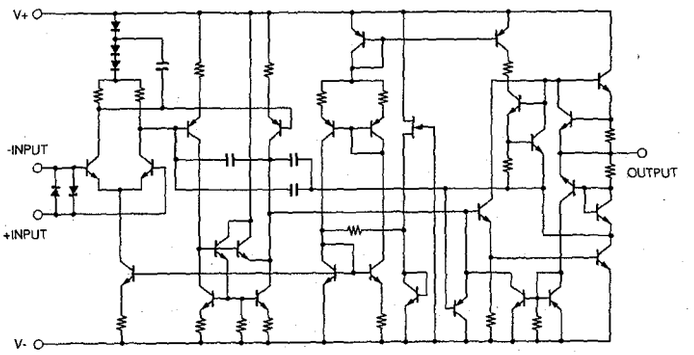


NJM2114(Position NO.7555,7655)

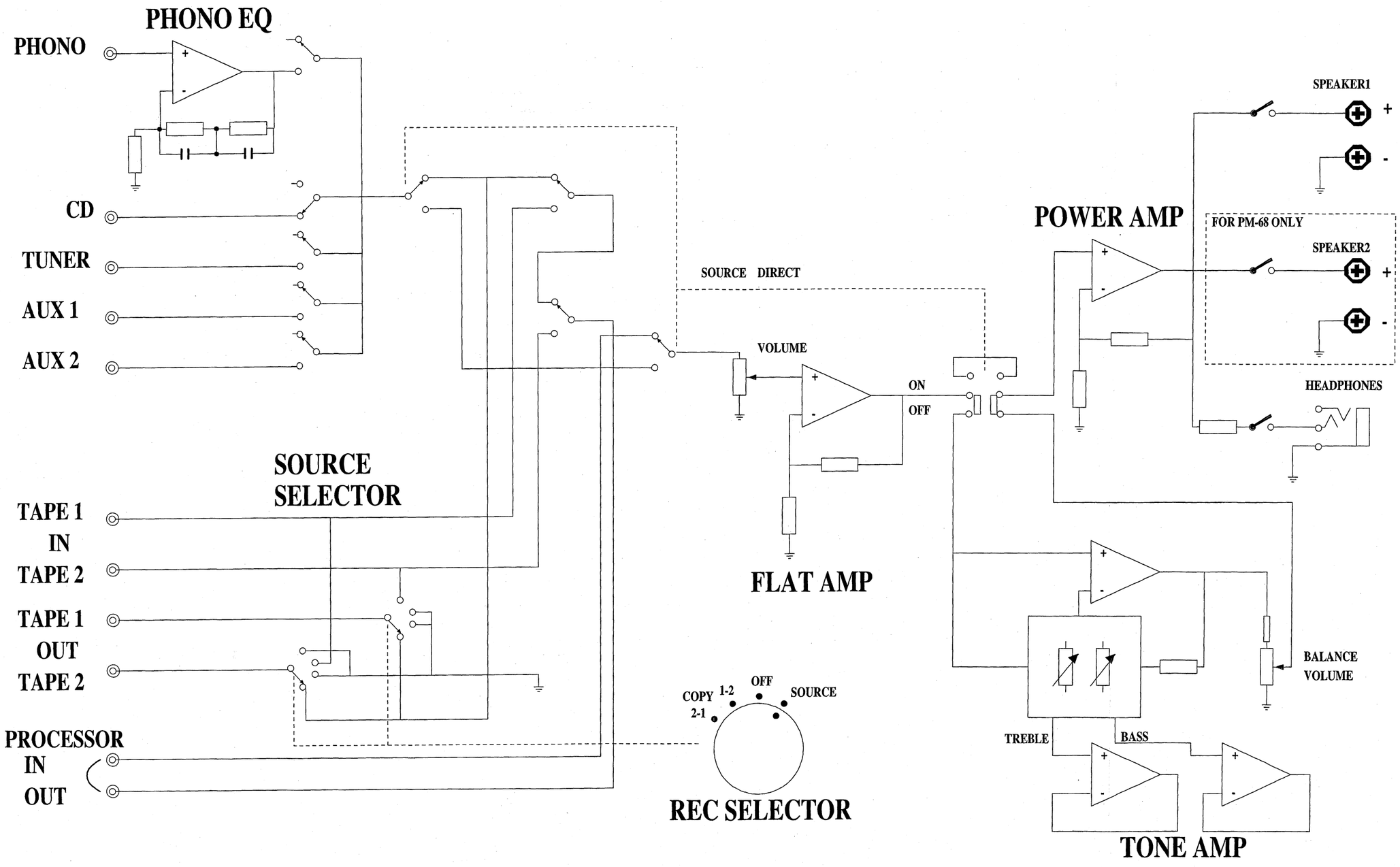
NJM2114



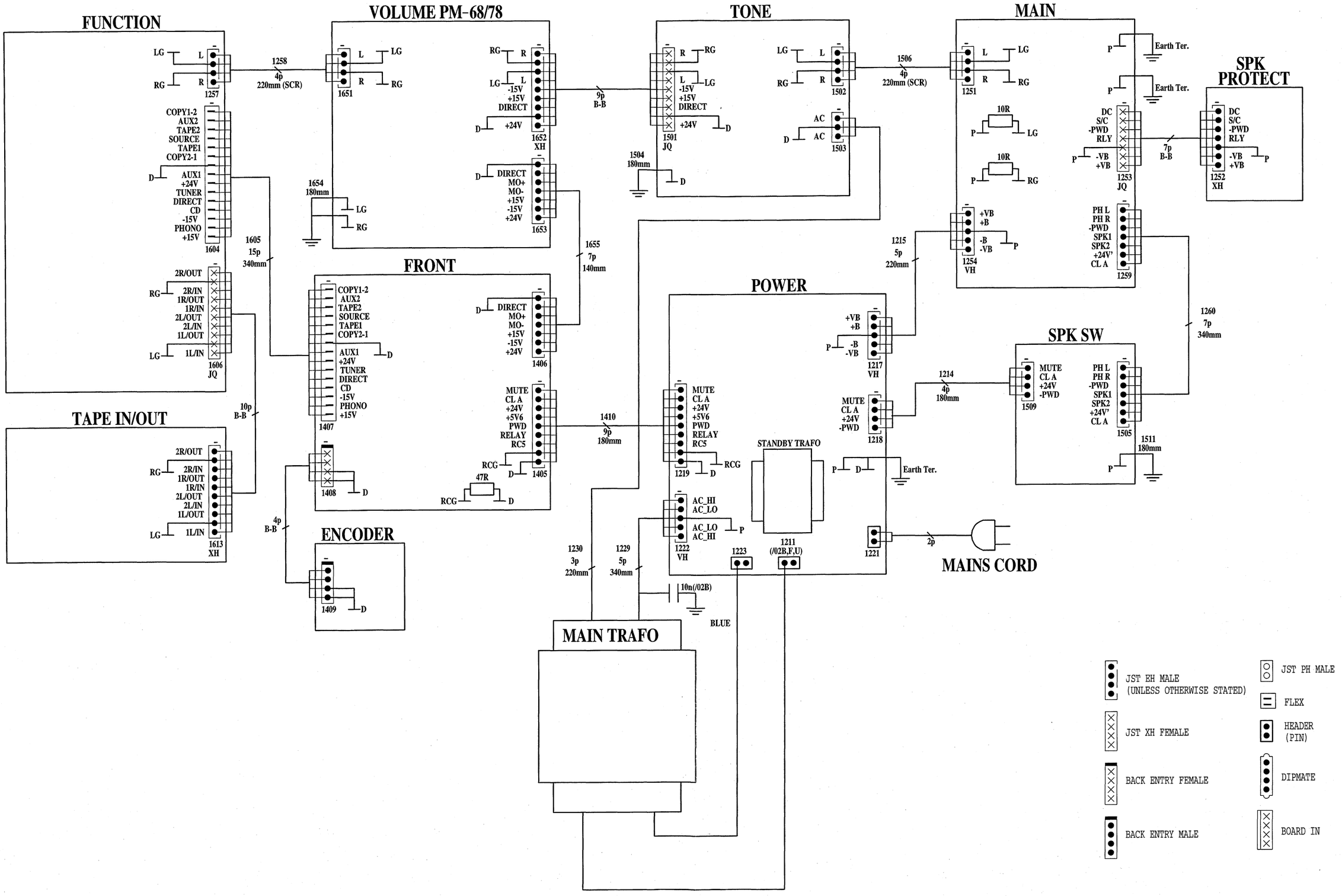
NJM2114



4. BLOCK DIAGRAM

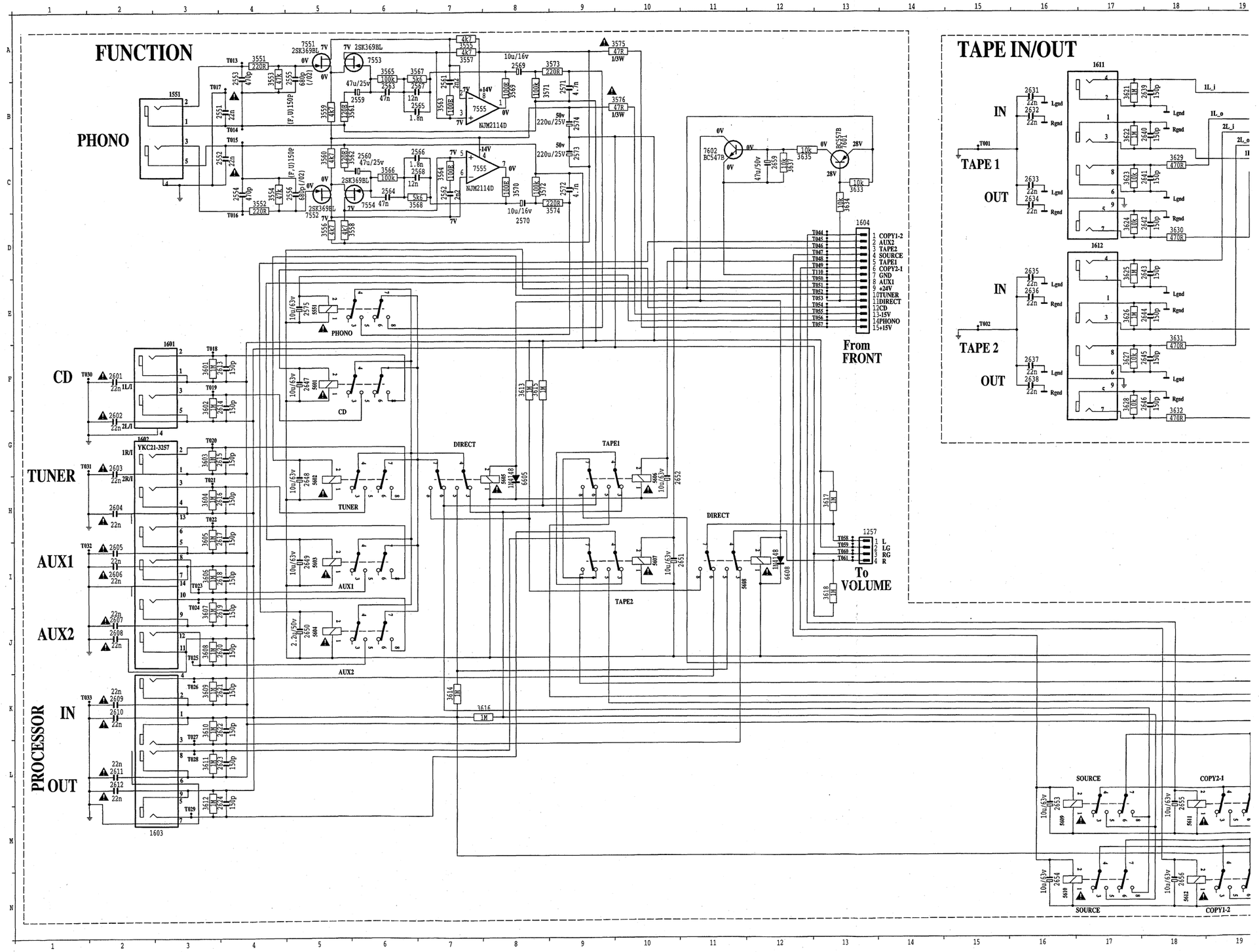


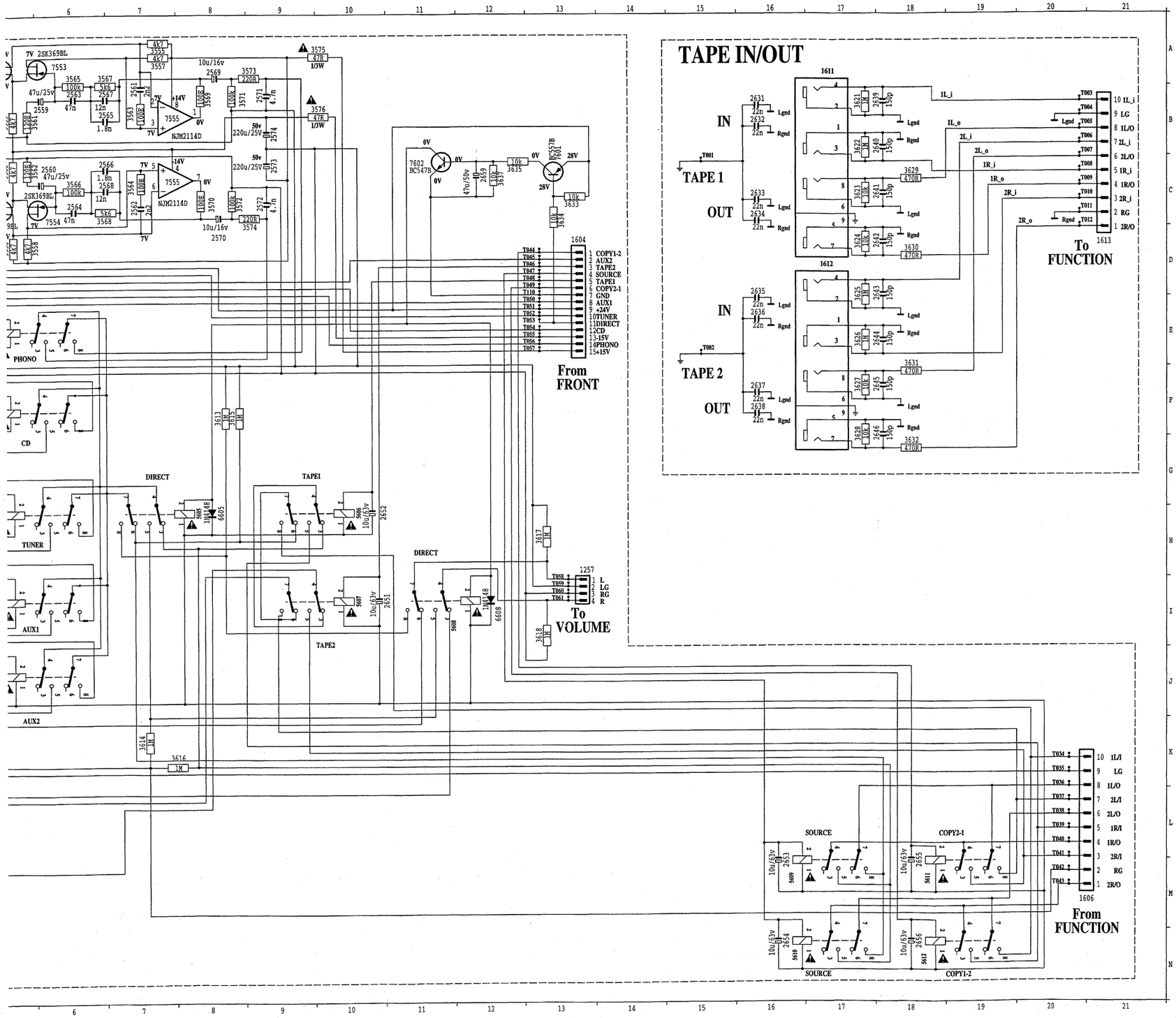
5. WIRING DIAGRAM



6. SCHEMATIC DIAGRAM AND PARTS LOCATION (PARTS SIDE)

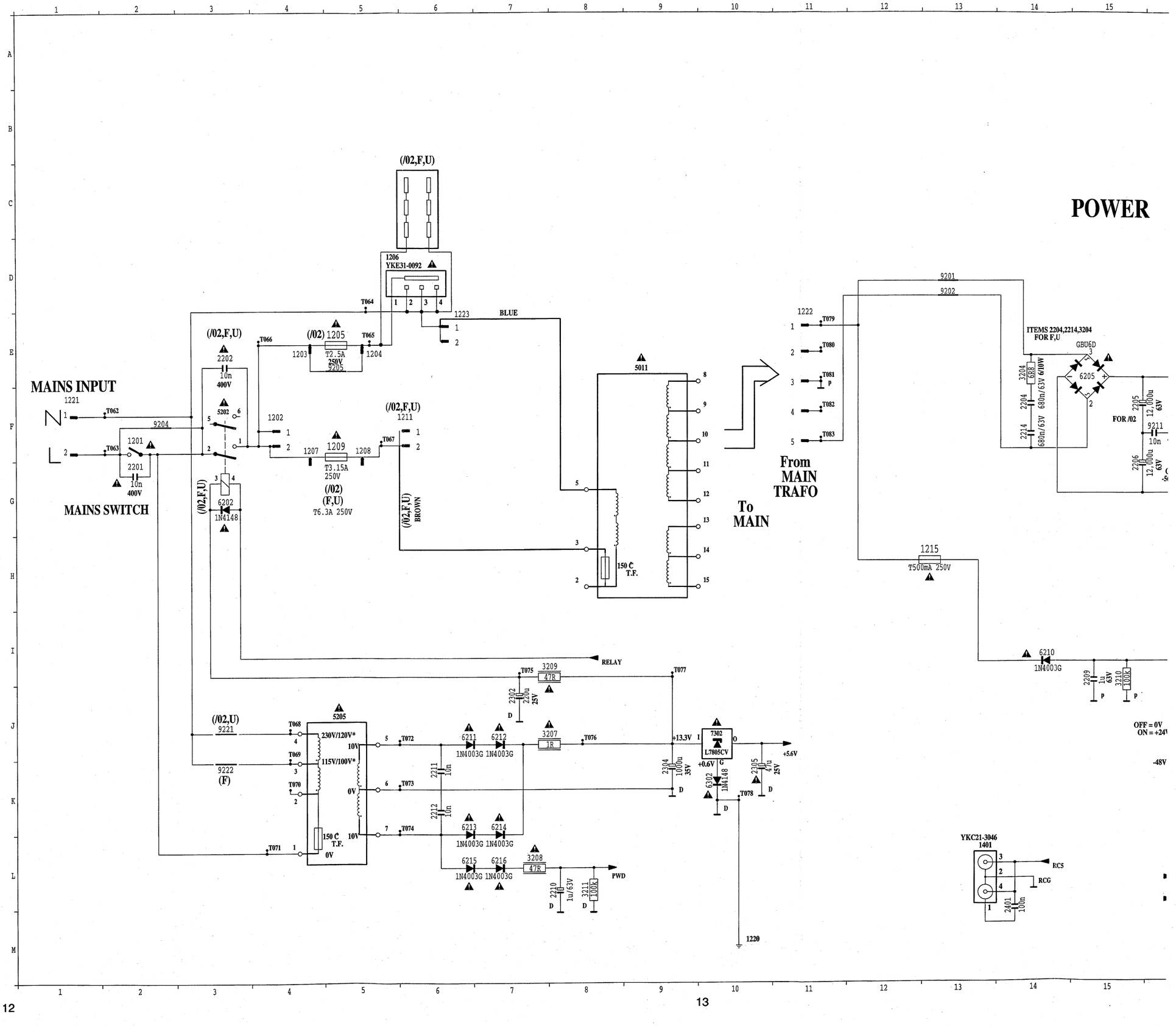
POWER CIRCUIT Ⅱ



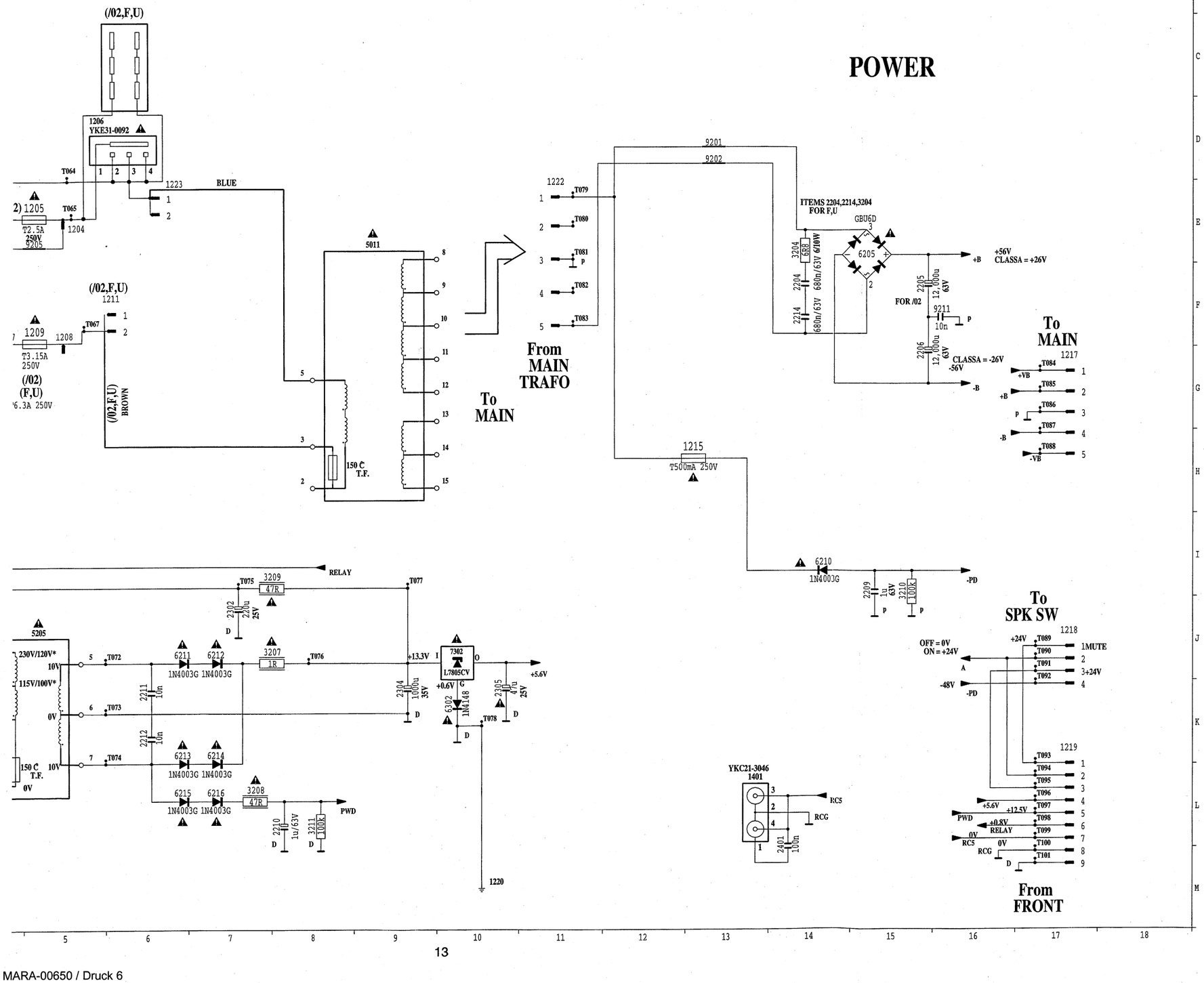

TAPE IN/OUT
1611
1612
IN
TAPE 1
OUT
IN
TAPE 2
OUT
1L_i
1L_o
2L_i
2L_o
1R_i
1R_o
2R_i
2R_o
1613
To FUNCTION
1604
From FRONT
1257
To VOLUME
1606
From FUNCTION
PHONO
CD
TUNER
AUX1
AUX2
DIRECT
TAPE1
TAPE2
SOURCE
COPY2-1
SOURCE
COPY1-2
NJM2114D
7555
2SK369BL
BC547B
BC557B

POWER CIRCUIT I (PM-68)

POWER



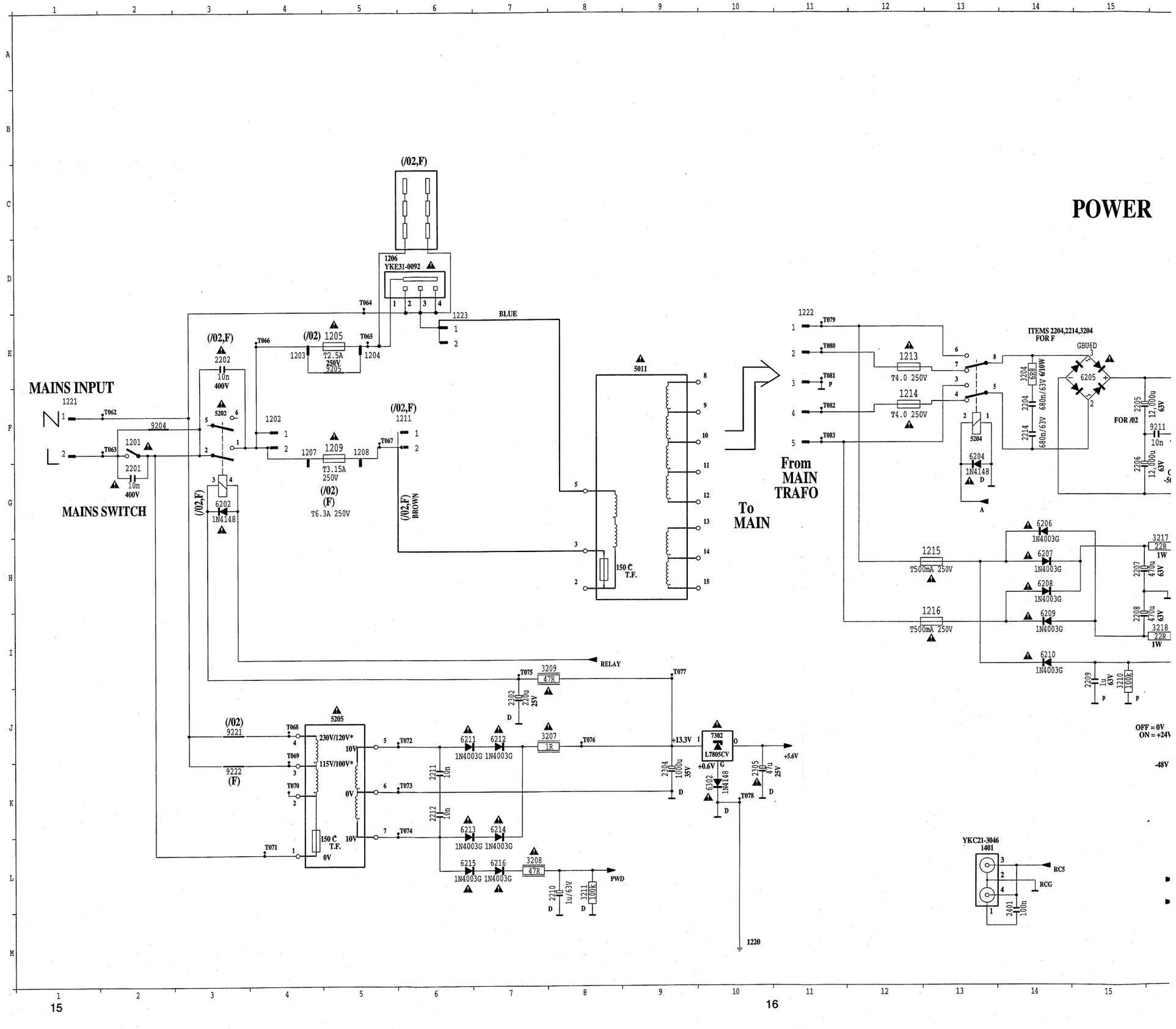
POWER



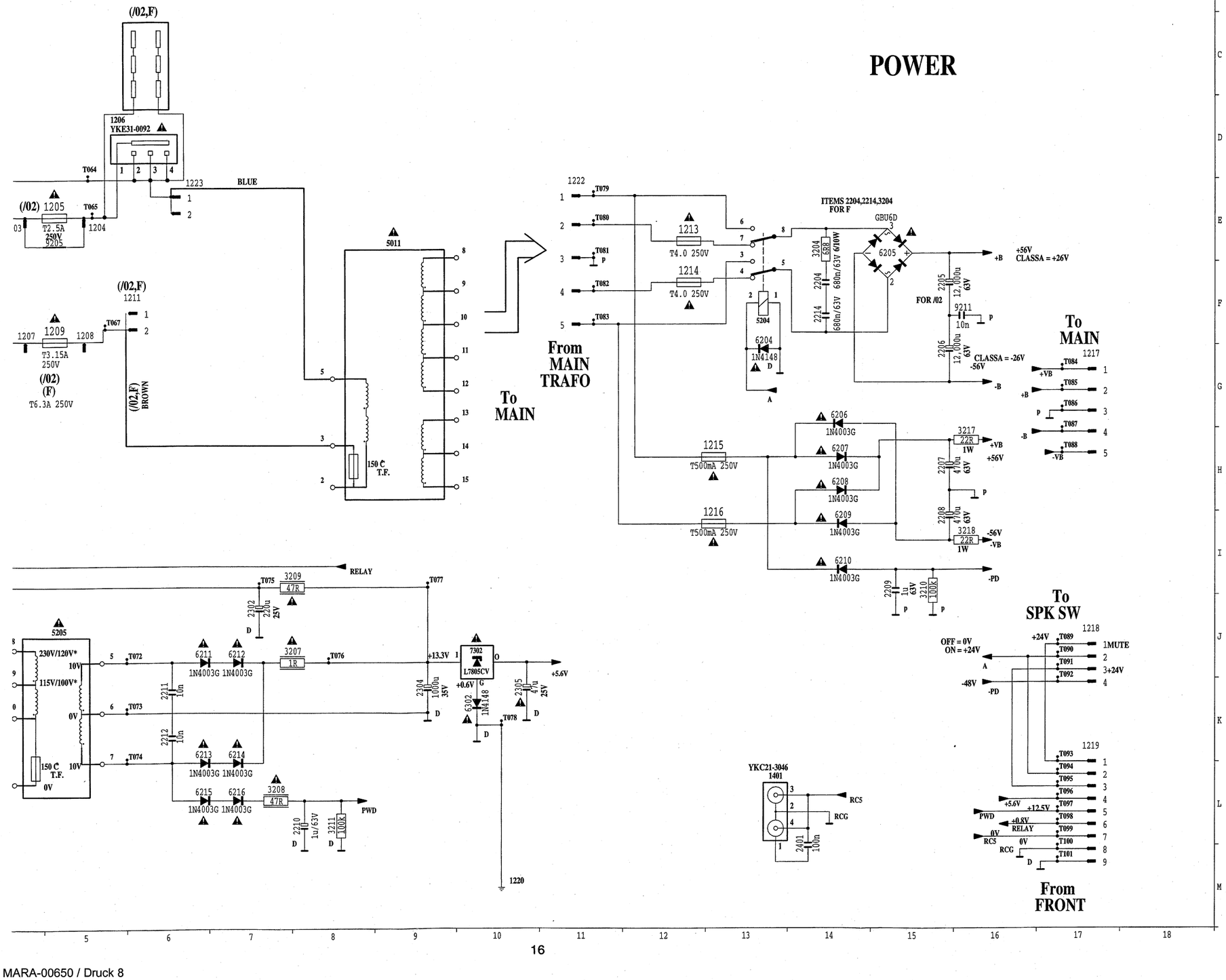
	1201	F 2
	1202	F 4
	1203	E 4
	1204	E 5
	1205	E 5
A	1206	D 5
	1207	F 4
	1208	F 5
	1209	F 5
	1211	F 5
	1212	F 7
	1213	E12
	1214	F12
	1215	H13
	1216	I13
B	1217	G17
	1218	J17
	1219	K17
	1221	F 1
	1222	E11
	1223	E 6
	1224	A 8
	1225	A 9
	1226	B 9
	1227	B 9
	1228	C 9
C	1229	J 3
	1230	K 3
	1231	J 3
	1232	J 3
	1233	J 3
	1234	K 3
	1401	L13
	2201	G 2
	2202	B 3
	2204	F14
	2205	F15
D	2206	G15
	2207	H15
	2208	I15
	2209	I15
	2210	L 8
	2211	K 6
	2212	K 6
	2214	F14
	2215	H12
	2216	H12
	2217	F15
E	2302	J 7
	2304	K 9
	2305	K10
	2401	L14
	3204	E14
	3207	J 8
	3208	L 7
	3209	I 8
	3210	I15
	3211	L 8
F	3217	H16
	3218	I16
	5202	F 3
	5204	F13
	6202	G 3
	6204	F13
	6205	E15
	6206	G14
	6207	H14
	6208	H14
	6209	I14
G	6210	I14
	6211	J 6
	6212	J 7
	6213	K 6
	6214	K 7
	6215	L 6
	6216	L 7
	6302	K10
	7302	J10
	9201	D13
	9202	D13
H	9204	F 2
	9205	E 5
	9206	J 4
	9221	J 4
	9222	J 4

POWER CIRCUIT I (PM-78)

POWER



POWER



1201 F 2
1202 F 4
1203 E 4
1204 E 5
1205 E 5
1206 D 5
1207 F 4
1208 F 5
1209 F 5
1211 F 5
1212 F 7
1213 E12
1214 F12
1215 H13
1216 I13
1217 G17
1218 J17
1219 K17
1221 F 1
1222 E11
1223 E 6
1224 A 8
1225 A 9
1226 B 9
1227 B 9
1228 C 9
1229 J 3
1230 K 3
1231 J 3
1232 J 3
1233 J 3
1234 K 3
1401 L13
2201 G 2
2202 B 3
2204 F14
2205 F15
2206 G15
2207 H15
2208 I15
2209 I15
2210 L 8
2211 K 6
2212 K 6
2214 F14
2215 H12
2216 H12
2217 F15
2302 J 7
2304 K 9
2305 K10
2401 L14
3204 E14
3207 J 8
3208 L 7
3209 I 8
3210 I15
3211 L 8
3217 H16
3218 I16
5202 F 3
5204 F13
6202 G 3
6204 F13
6205 E15
6206 E14
6207 H14
6208 H14
6209 I14
6210 I14
6211 J 6
6212 J 7
6213 K 6
6214 K 7
6215 L 6
6216 L 7
6302 K10
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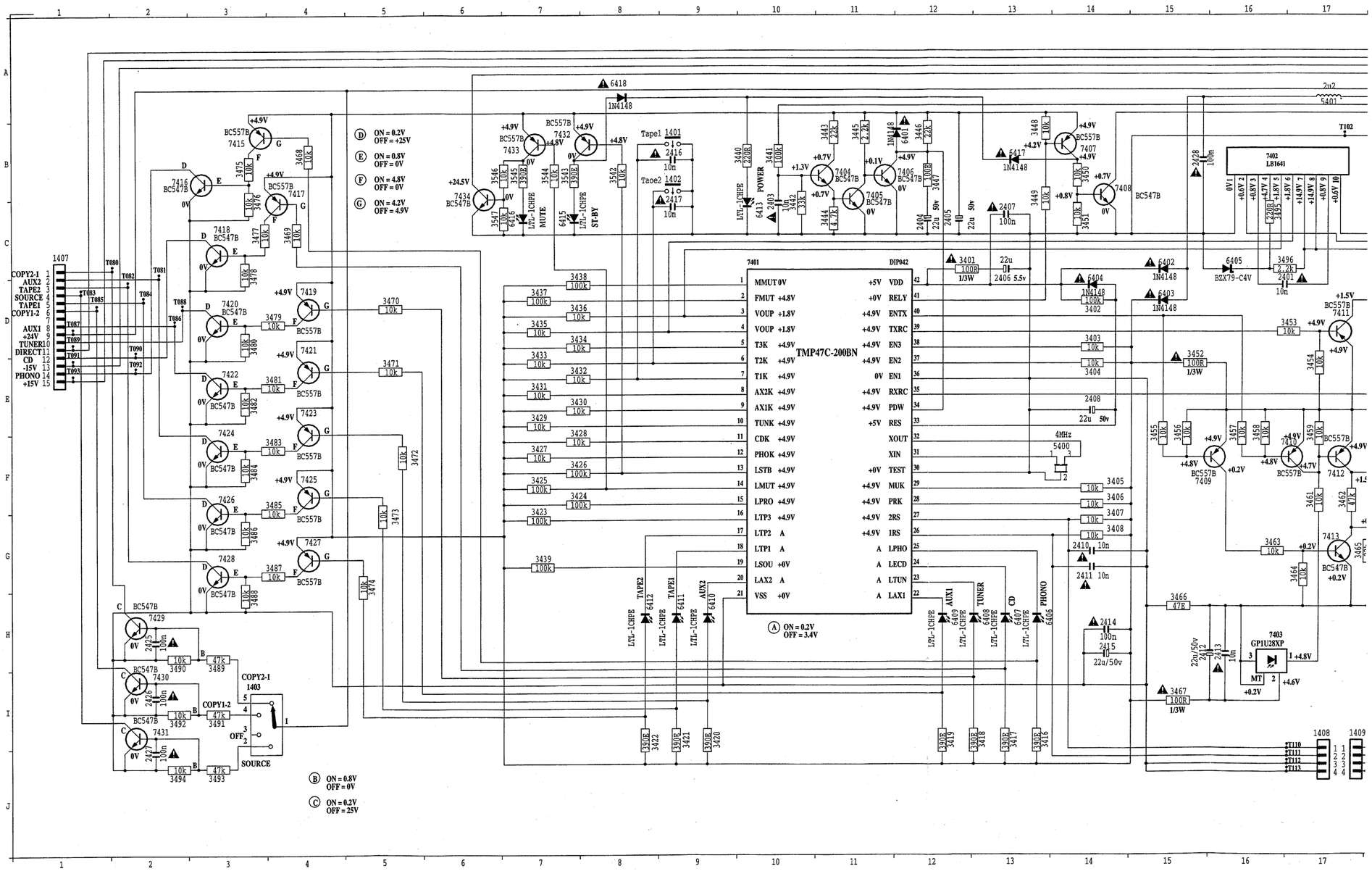
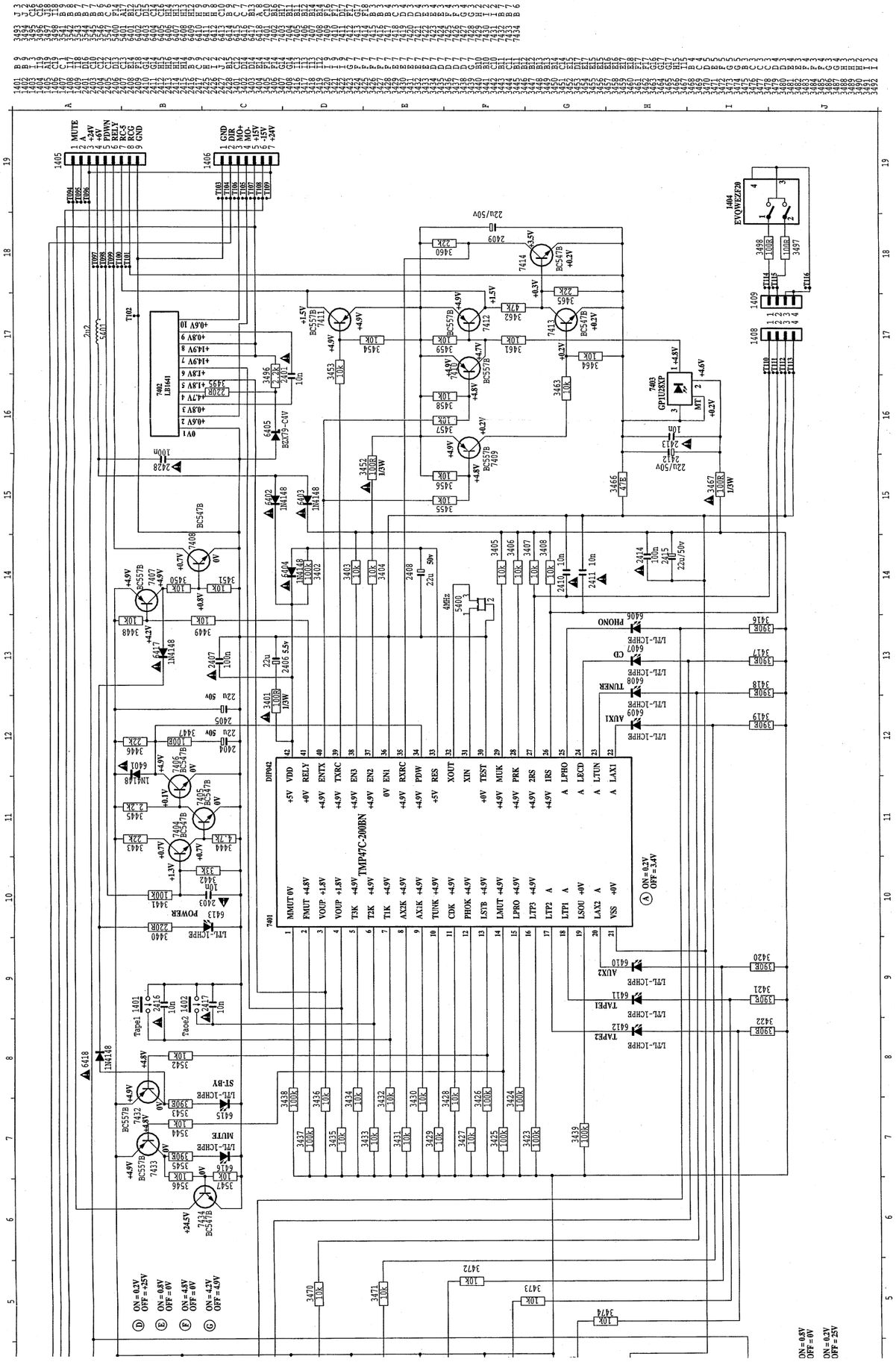
9205 E 5
9206 J 4
9221 J 4
9222 J 4

CONTROL CIRCUIT I (PM-68)




MUTE
A
+24V
+8V
PDWN
RELY
RC-S
RCG
GND
GND
DIR
MO+
MO-
+15V
+24V
TMP47C-200BN
DIP042
7401
MMUT 0V
FMUT +4.8V
VOUP +1.8V
VOUP +1.8V
T3K +4.9V
T2K +4.9V
TIK +4.9V
AXIK +4.9V
AXIK +4.9V
TUNK +4.9V
CDK +4.9V
PHOK +4.9V
LSTB +4.9V
LMUT +4.9V
LPRO +4.9V
LTP3 +4.9V
LTP2 A
LTP1 A
LSOU +0V
LAX2 A
VSS +0V
+5V VDD
+0V RELY
+4.9V ENTX
+4.9V TXRC
+4.9V EN3
+4.9V EN2
0V EN1
+4.9V RXRC
+4.9V PDW
+5V RES
XOUT
XIN
+0V TEST
+4.9V MUK
+4.9V PRK
+4.9V 2RS
+4.9V 1RS
A LPHO
A LECD
A LTUN
A LAX1
A ON=0.2V OFF=3.4V
LB1641
7402
+0.6V 10
+0.8V 9
+14.9V 8
+14.9V 7
+1.8V 6
+1.8V 5
+4.7V 4
+0.8V 3
+0.6V 2
0V 1
T102
5401
2u2
2228
100n
6405
BZX79-C4V
2220R
3495
3496
2401
10n
6402
1N4148
6403
1N4148
3452
100R
1/2W
6404
1N4148
3402
3403
10K
3404
10K
3405
10K
3406
10K
3407
10K
3408
10K
2410
10n
2411
10n
2414
10n
2415
22u/50v
2412
22u/50v
2413
10n
3466
4.7K
3467
100R
1/2W
2408
22u
50v
2409
22u/50v
3460
22K
7414
BC547B
3465
22K
3462
47K
7412
BC557B
3459
10K
3461
10K
7413
BC547B
3464
10K
3454
10K
7411
BC557B
3453
10K
3458
10K
3457
10K
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BC557B
3456
10K
3455
10K
7403
GP1U283XP
MT1
MT2
2407
100n
2406
22u
5.5v
3401
100R
1/2W
6417
1N4148
3450
10K
7408
BC547B
3451
10K
7407
BC557B
3448
10K
3449
10K
2405
22u
50v
2404
22u
50v
3446
22K
3447
100R
6401
1N4148
7406
BC547B
3445
2.2K
7405
BC547B
3444
4.7K
7404
BC547B
3443
22K
3442
33K
2403
10u
100K
3441
6413
POWER
3440
220R
2416
10n
2417
10n
Tape1 1401
Tape2 1402
6418
1N4148
3542
10K
7432
BC557B
3543
390R
6415
ST-BY
3544
10K
7433
BC557B
3545
390R
6416
MUTE
3546
10K
7434
BC547B
3547
3438
100K
3436
10K
3435
10K
3434
10K
3433
10K
3432
10K
3431
10K
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1406
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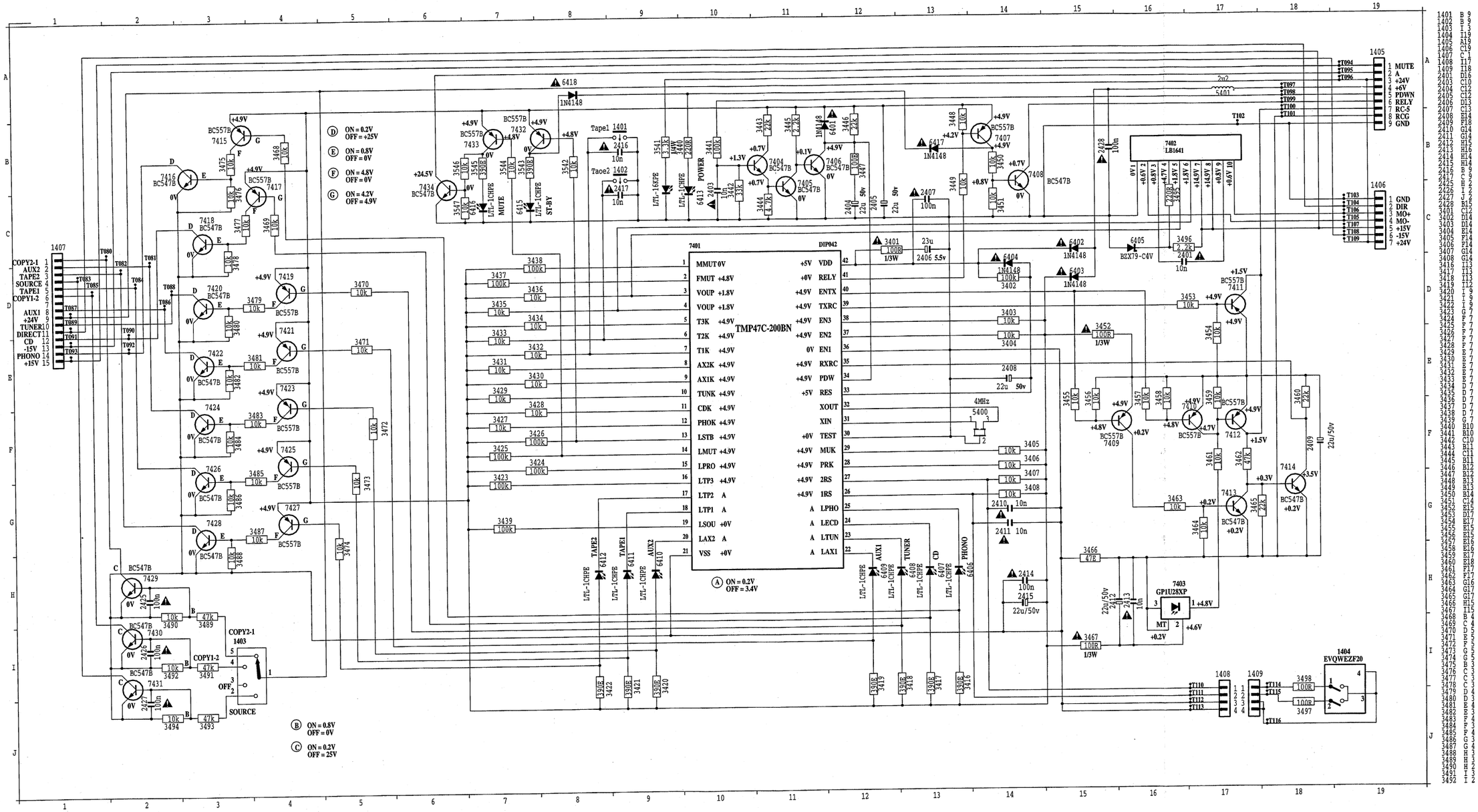
EVQWEZX20
1409
1408
3498
100R
3497
100R
T116
T110
T111
T112
T113
T114
T115
6406
PHONO
6407
CD
6408
TUNER
6409
AUX1
6410
AUX2
6411
TAPE1
6412
TAPE2
L/TL-ICHPE
3418
390R
3417
390R
3419
390R
3420
390R
3421
390R
3422
390R
ON=0.2V OFF=+25V
ON=0.8V OFF=0V
ON=4.8V OFF=0V
ON=4.2V OFF=4.9V
ON=0.8V OFF=0V
ON=0.2V OFF=25V

CONTROL CIRCUIT I (PM-78)



1401 B 9 3493 J 3
1402 B 9 3494 J 2
1403 I 3 3495 C16
1404 I19 3496 C16
1405 A19 3497 I18
1406 C19 3498 I18
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1408 I17 3542 B 8
1409 I18 3543 B 7
2401 D16 3544 B 7
2403 C10 3545 B 7
2404 C12 3546 B 6
2405 C12 3547 C 6
2406 D13 5400 F14
2407 C13 5401 A17
2408 E14 6401 B12
2409 F16 6402 C15
2410 G14 6403 D15
2411 G16 6404 C14
2412 H15 6405 C16
2413 H16 6406 H14
2414 H14 6407 H13
2415 H14 6408 H13
2416 B 9 6409 H12
2417 C 9 6410 H 9
2425 H 2 6411 H 8
2426 J 2 6412 H 8
2427 J 2 6413 C10
2428 B15 6414 B 9
3401 C12 6415 C 7
3402 D14 6416 C 7
3403 D14 6417 B13
3404 E14 6418 A 8
3405 F14 7401 C10
3406 F14 7402 B16
3407 G14 7403 H17
3408 G14 7404 B11
3410 I13 7405 B11
3417 I13 7406 B12
3418 I13 7407 B14
3419 I 9 7408 B14
3420 I 9 7409 F16
3421 I 9 7410 F17
3422 I 9 7411 D17
3423 G 7 7412 F17
3424 F 7 7413 G17
3425 F 7 7414 F18
3426 F 7 7415 B 3
3427 F 7 7416 B 3
3428 F 7 7417 B 4
3429 E 7 7418 C 3
3430 E 7 7419 D 4
3431 E 7 7420 D 3
3432 E 7 7421 D 4
3433 E 7 7422 E 3
3434 D 7 7423 E 4
3435 D 7 7424 E 3
3436 D 7 7425 F 4
3437 D 7 7426 F 3
3438 D 7 7427 G 4
3439 G 7 7428 G 3
3440 B10 7429 H 3
3441 B10 7430 I 2
3442 C10 7431 I 2
3443 B11 7432 B 7
3444 G11 7433 B 7
3445 B11 7434 B 6
3446 B12
3447 B12
3448 B13
3449 B13
3450 B14
3451 C14
3452 B15
3453 D17
3454 E17
3455 B15
3456 B15
3457 B16
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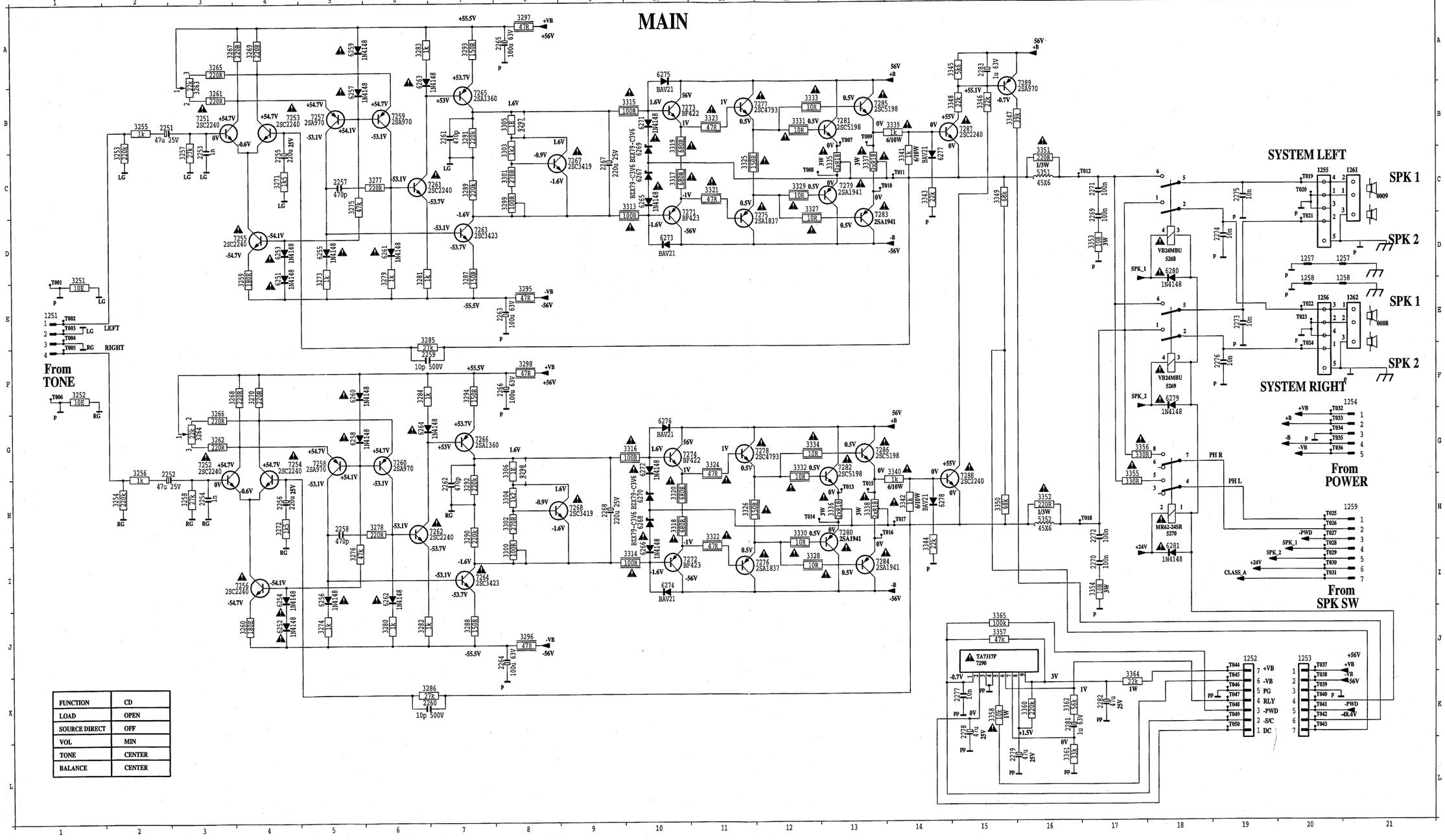
3460 B18
3461 F17
3462 F17
3463 G16
3464 G17
3465 G17
3466 H15
3467 I15
3468 B 4
3469 C 4
3470 C 5
3471 E 5
3472 F 5
3473 G 5
3474 B 5
3475 B 3
3476 C 3
3477 C 3
3478 D 4
3479 D 3
3480 D 3
3481 E 4
3482 E 3
3483 F 4
3484 F 3
3485 F 4
3486 G 3
3487 G 4
3488 H 3
3489 H 3
3490 H 2
3491 I 3
3492 I 2

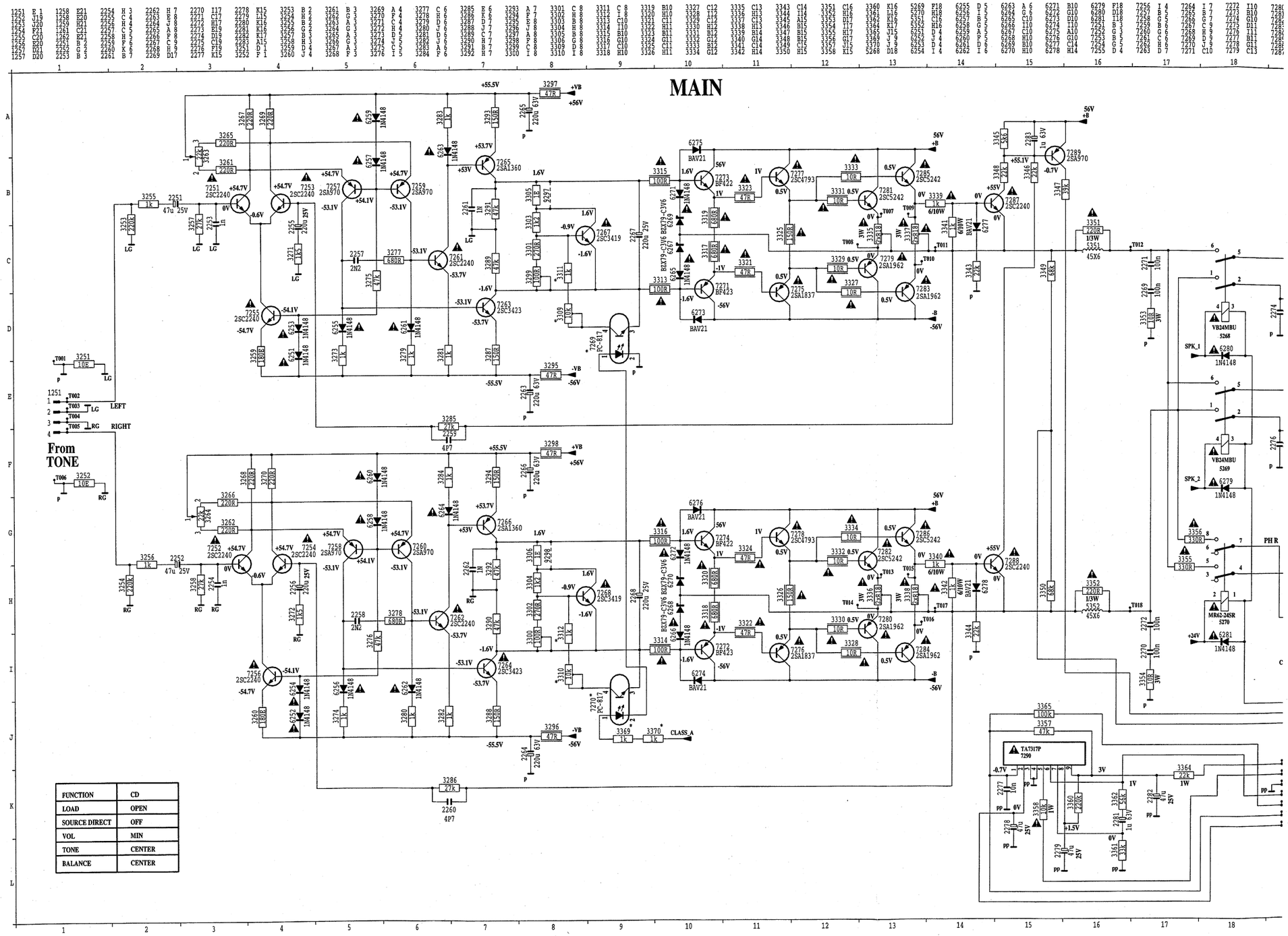
MAIN CIRCUIT (PM-68)

1251 E 1 1252 J19 1253 J20 1254 F21 1255 C20 1256 E20 1257 D21 1258 B21 1259 B20 1260 B21 1261 E21 1262 E21 2251 B 2 2252 C 2 2253 B 3 2254 H 3 2255 C 4 2256 C 5 2257 C 5 2258 H 5 2259 F 6 2260 B 7 2261 B 7 2262 H 7 2263 B 8 2264 J 8 2265 A 8 2266 F 8 2267 C 9 2268 H 9 2269 D17 2270 I17 2271 C17 2272 H17 2273 B19 2274 D19 2275 C19 2276 F19 2277 K15 2278 K15 2279 L15 2280 K16 2281 K16 2282 K17 2283 A15 3251 D 1 3252 F 1 3253 B 2 3254 H 2 3255 B 2 3256 G 2 3257 B 3 3258 B 3 3259 D 3 3260 J 4 3261 B 3 3262 G 3 3263 A 3 3264 G 3 3265 A 3 3266 G 3 3267 A 3 3268 F 3 3269 A 4 3270 F 4 3271 C 4 3272 H 4 3273 D 5 3274 C 5 3275 C 5 3276 I 5 3277 C 6 3278 H 6 3279 D 6 3280 F 6 3281 D 6 3282 A 6 3284 P 6 3285 E 6 3286 D 6 3287 D 7 3288 J 7 3289 C 7 3290 H 7 3291 B 7 3292 H 7 3293 A 7 3294 F 7 3295 E 8 3296 J 8 3297 E 8 3298 F 8 3299 C 8 3300 I 8 3301 C 8 3302 H 8 3303 B 8 3304 H 8 3305 B 8 3306 G 8 3309 D 8 3310 I 8 3311 C 8 3312 L 8 3313 C10 3314 I10 3315 B10 3316 H10 3317 C10 3318 H10 3319 B10 3320 H10 3321 C11 3322 H11 3323 B11 3324 G11 3325 C11 3326 H11 3327 C12 3328 I12 3329 C12 3330 H12 3331 B12 3332 G12 3333 C12 3334 I12 3335 C13 3337 C13 3338 H13 3339 B12 3340 G12 3341 C14 3342 H14 3343 C14 3344 I14 3345 A15 3346 B15 3347 B15 3348 B15 3349 C15 3350 H15 3351 C16 3352 H16 3353 D17 3354 I17 3355 J15 3356 G17 3357 J15 3358 K15 3360 K16 3361 L16 3362 K16 3363 K17 3364 K17 3365 J16 3369 J 9 3370 J 9 5268 D18 5269 F18 5270 H18 5351 C16 5352 H16 6253 D 4 6254 I 4 6255 D 5 6256 I 5 6257 B 5 6258 G 5 6259 A 5 6260 F 5 6261 D 6 6262 I 6 6263 A 6 6264 G 6 6265 C10 6266 I10 6267 C10 6268 H10 6269 H10 6270 H10 6271 B10 6272 G10 6273 D10 6274 I10 6275 A10 6276 G10 6277 C14 6278 H14 6279 F18 6280 I18 6281 I18 6283 B 5 6284 G 5 6285 B 6 6286 G 6 6287 C 6 6289 D 6 6290 D 6 6291 A 6 6292 A 6 6293 C 6 6294 I 6 6295 J 6 6296 J 6 6297 J 6 6298 J 6 6299 J 6 7251 2SC2240 7252 2SC2240 7253 2SC2240 7254 2SC2240 7255 2SC2240 7256 2SC2240 7257 2SA970 7258 2SA970 7259 2SA970 7260 2SA970 7261 2SC2240 7262 2SC2240 7263 2SC3423 7264 2SC3423 7265 2SA1360 7266 2SA1360 7267 2SC3419 7268 2SC3419 7271 BF423 7272 BF423 7273 BF422 7274 BF422 7275 2SA1837 7276 2SA1837 7277 2SC4793 7278 2SC4793 7279 2SA1941 7280 2SA1941 7281 2SC5198 7282 2SC5198 7283 2SA1941 7284 2SA1941 7285 2SC5198 7286 2SC5198 7287 2SC2240 7288 2SC2240 7289 2SA970 7290 TA7317P 7272 7 7273 B10 7281 B13 7282 G13 7283 D13 7284 I13 7285 B13 7286 G13 7287 B15 7288 H15 7289 B16 7290 J15 9297 B 8 9298 G 8

MAIN



MAIN CIRCUIT(PM-78)



SYSTEM LEFT
SPK 1
SPK 2
SYSTEM RIGHT
SPK 1
SPK 2
From POWER
From SPK SW
PH R
PH L
CLASS_A
SPK_1
SPK_2
+55.5V
-55.5V
+56V
-56V
+53.7V
-53.7V
+54.7V
-54.7V
+54.1V
-54.1V
+53V
-53V
+55V
-55V
+55.1V
-55.1V
+24V
-24V
+0.7V
-0.7V
+1.5V
-1.5V
1.6V
-1.6V
0.9V
-0.9V
1V
-1V
0.5V
-0.5V
0V
+B
-B
+VB
-VB
PG
RLY
-PWD
-S/C
DC
-48.4V
+56V
TA7317P
7290
VB24MBU
5268
VB24MBU
5269
MR62-24SR
5270
45X6
1/3W
3W
6/10W
BAV21
BAV21
BAV21
BAV21
BAV21
BAV21
BAV21
BAV21
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BAV21
1N4148
BZX79-C3V6
BZX79-C3V6
BZX79-C3V6
PC-817
PC-817
PC-817
BP422
BP423
BP422
BP423
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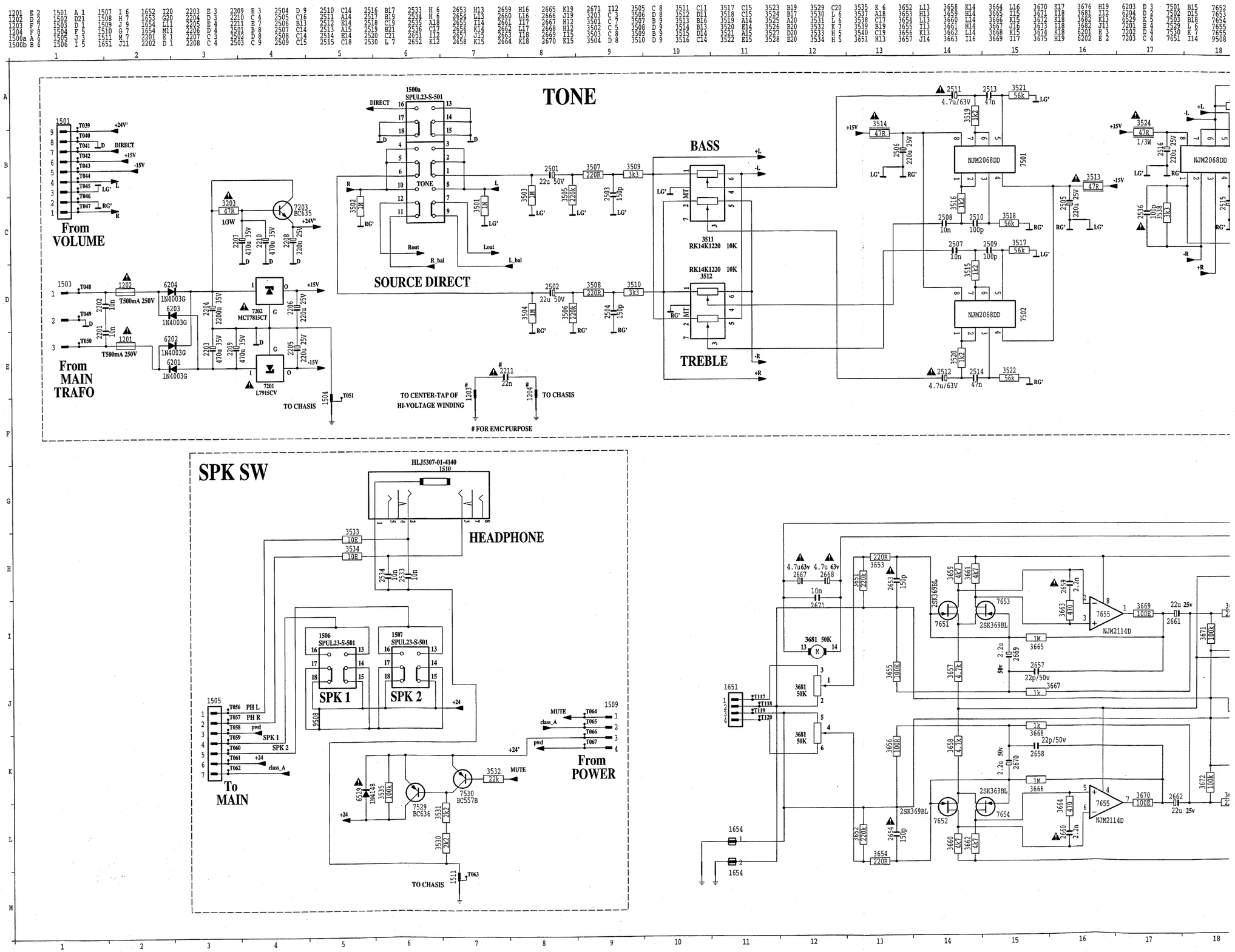
CONTROL CIRCUIT II (PM-68)



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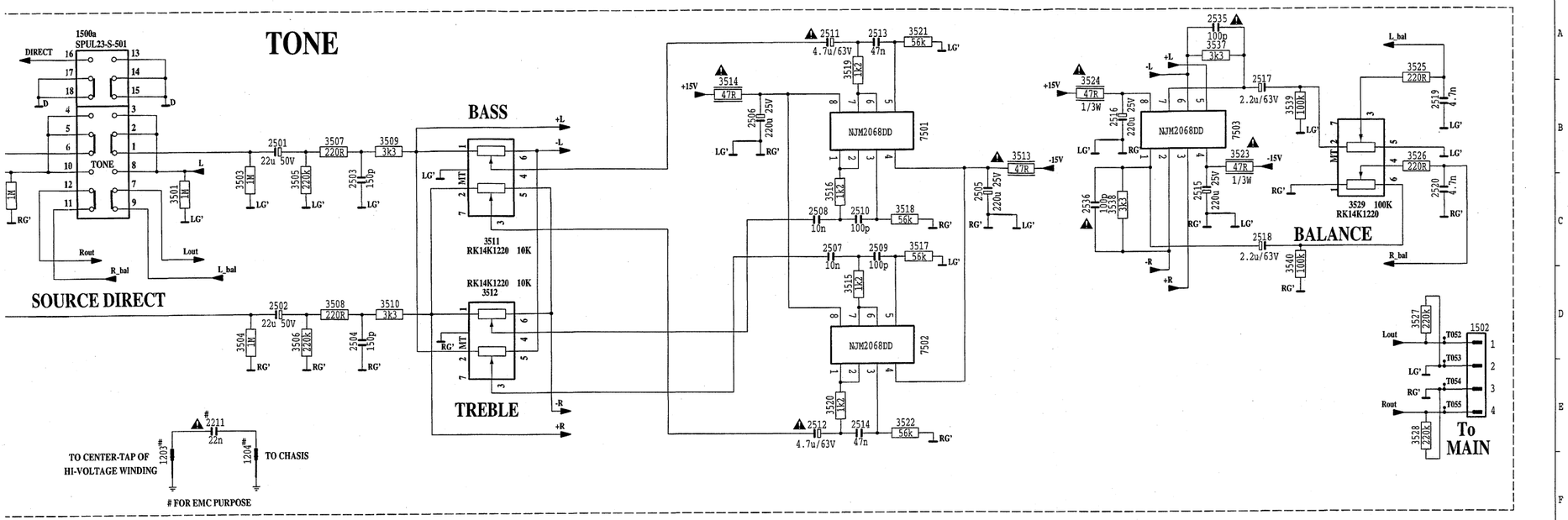
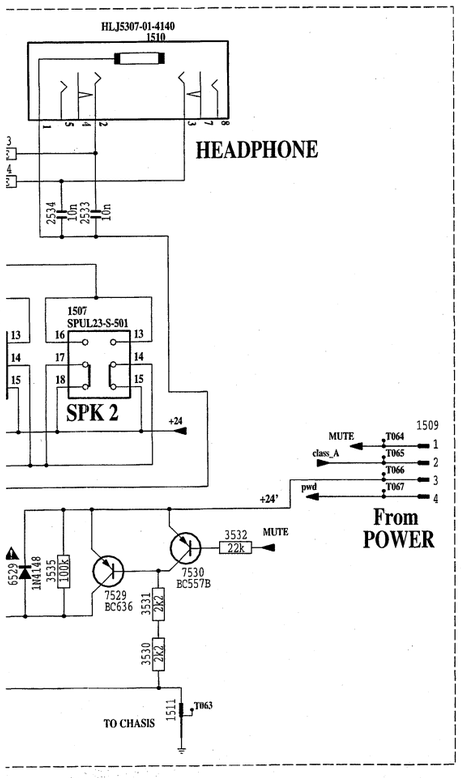
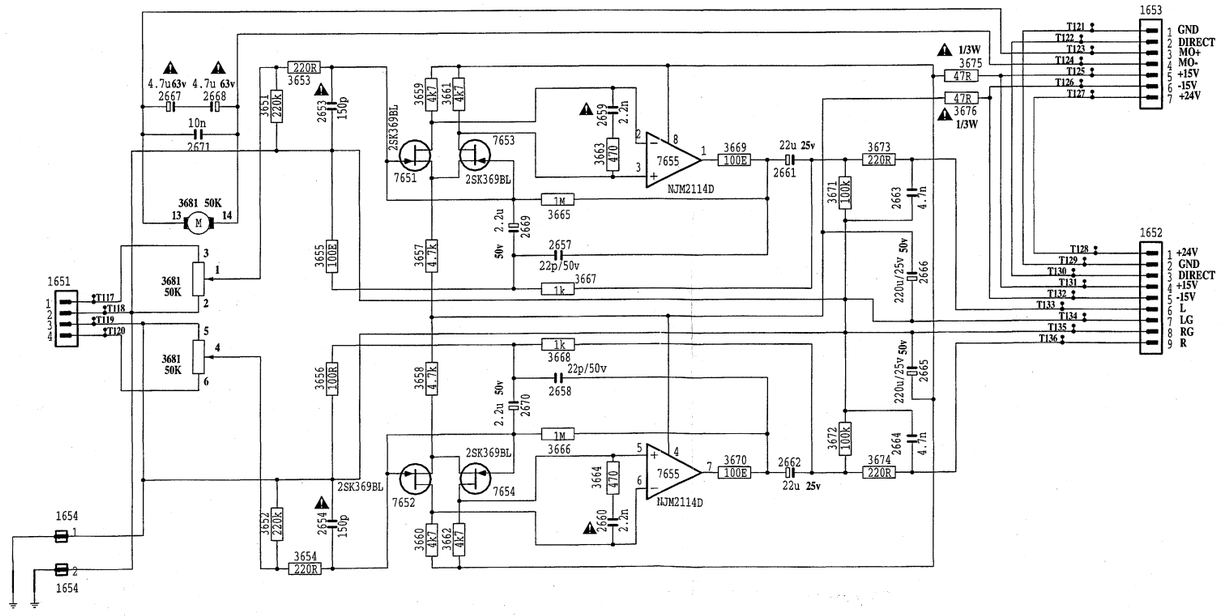
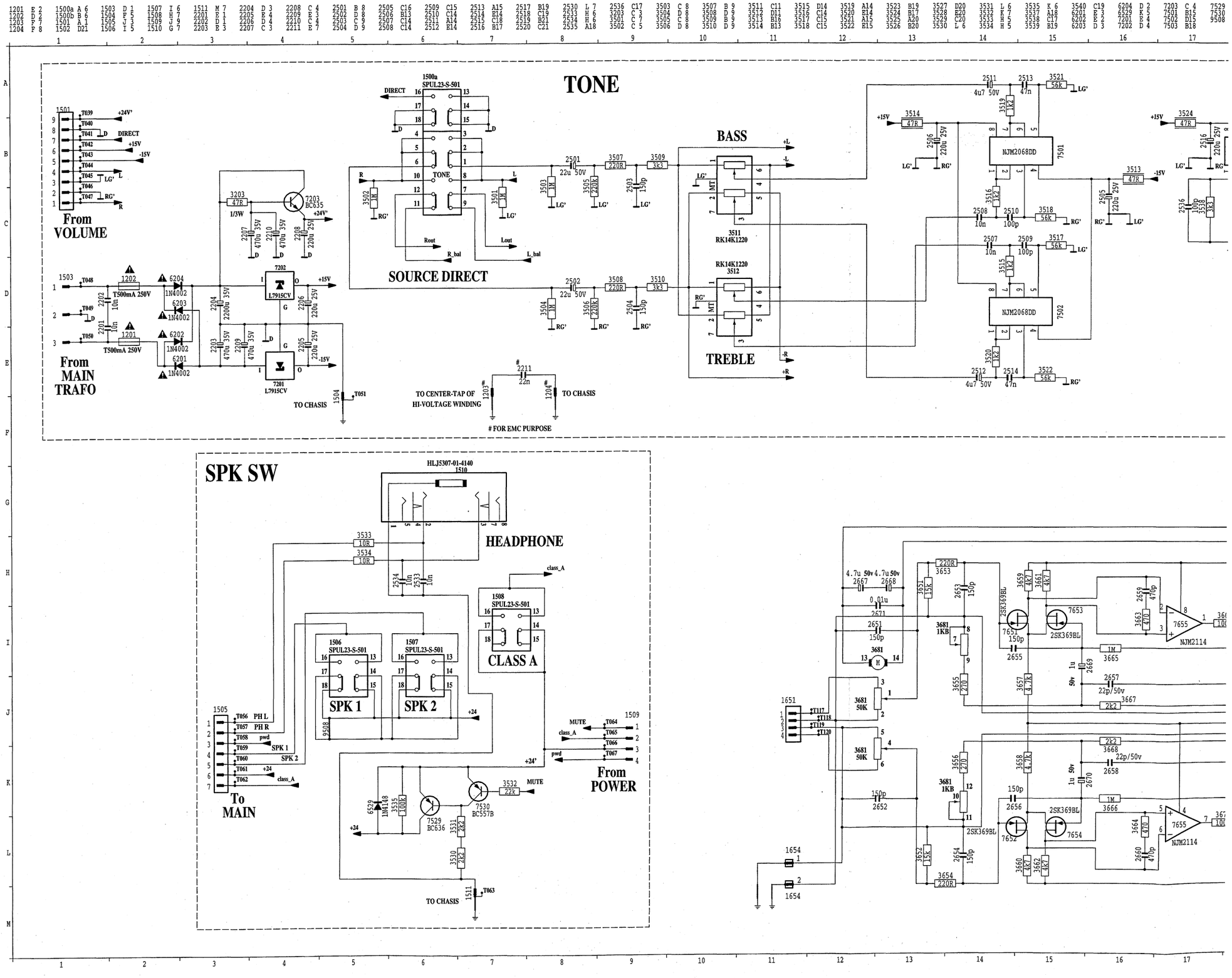
2517	B19	2534	H 6	2654	L13	2660	L16	2666	J19	3203	C 3	3506	D 8	3512	D11	3518	C15	3524	B17	3530	L 6	3537	A18	3653	H13	3659	K14	3665	I15	3671	I18	3681	I12	6204	D 2	7502	D15	7653	I15
2518	C19	2535	A18	2655	I14	2661	L17	2667	H12	3501	C 7	3507	B 9	3513	B16	3519	A14	3525	A20	3531	L 6	3538	C17	3654	L13	3660	L14	3666	K15	3672	K18	3682	K13	6529	K 5	7503	B18	7654	L15
2519	B21	2536	C17	2656	K14	2662	L17	2668	H12	3502	C 5	3508	D 9	3514	B13	3520	E14	3526	B20	3532	K 7	3539	B19	3655	I13	3661	H14	3667	J16	3673	I18	3682	J13	7201	E 4	7529	L 6	7655	I16
2520	C21	2651	I12	2657	J15	2663	I18	2669	I15	3503	C 8	3509	B 9	3515	D14	3521	E15	3527	D20	3533	H 5	3540	C19	3656	K13	3662	L14	3668	K15	3674	K18	6201	E 3	7202	D 4	7530	K 7	7655	L16
2530	L 7	2652	K12	2658	K15	2664	K18	2670	K15	3504	D 8	3510	D 9	3516	C14	3522	E15	3528	E20	3534	H 5	3651	H13	3657	J14	3663	I16	3669	I17	3675	H19	6202	E 2	7203	C 4	7651	I14	9508	J 5







CONTROL CIRCUIT Ⅱ (PM-78)



5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

A B C D E F G H I J K L M

TONE

1500a
SPUL23-S-501

DIRECT

TONE

SOURCE DIRECT

Rout Lout R_bal L_bal

BASS

TREBLE

3511 RK14K1220

RK14K1220 3512

NJM2068DD 7501

NJM2068DD 7502

NJM2068DD 7503

BALANCE

3529 RK14K1220

To MAIN

TO CENTER-TAP OF HI-VOLTAGE WINDING

TO CHASIS

FOR EMC PURPOSE

HLJ5307-01-4140
1510

HEADPHONE

1508 SPUL23-S-501

CLASS A

1507 SPUL23-S-501

SPK 1

SPK 2

From POWER

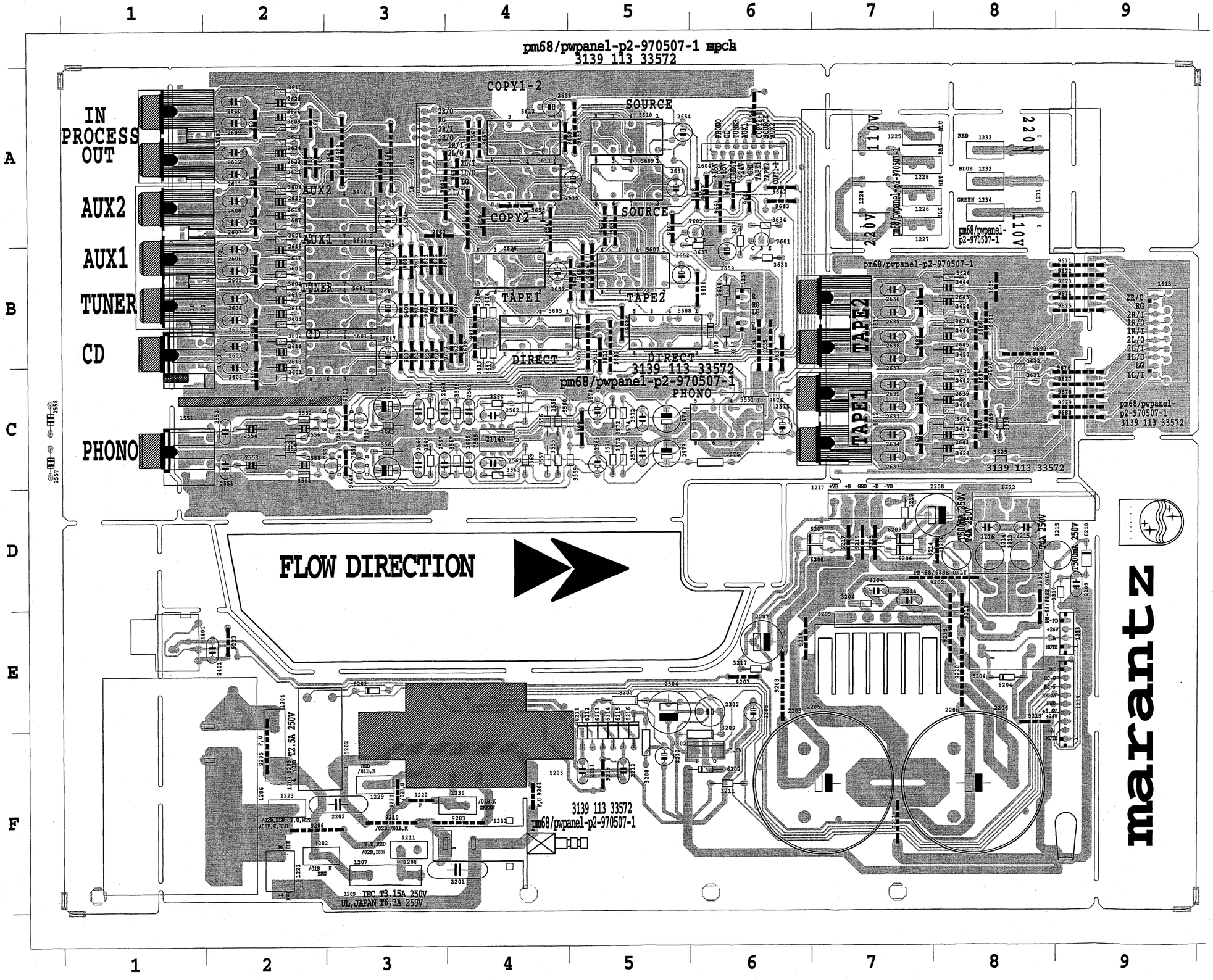
2SK369BL 7651 7652 7653 7654

NJM2114 7655

1653
1 GND
2 DIRECT
3 MO+
4 MO-
5 +15V
6 -15V
7 +24V

1652
1 +24V
2 GND
3 DIRECT
4 +15V
5 -15V
6 L
7 LG
8 RG
9 R

POWER BOARD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PROCESS
OUT
AUX2
AUX1
TUNER
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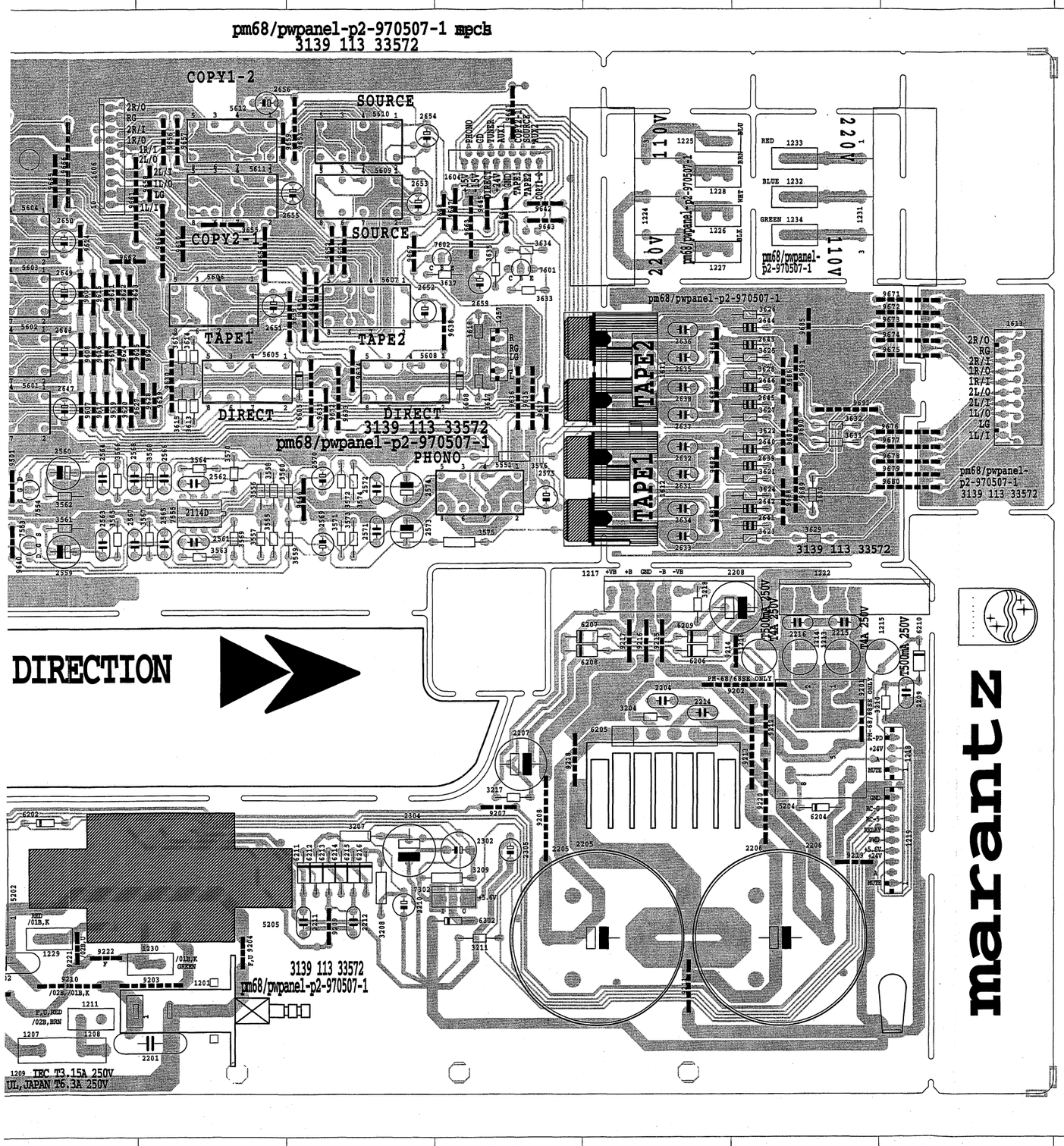
PHONO
COPY2-1
TAPE1
TAPE2
DIRECT
FLOW DIRECT
110V
220V
RED
BLUE
GREEN
2R/O
RG
2R/I
1R/O
1R/I
2L/O
2L/I
1L/O
LG
1L/I
T2.5A 250V
TEC T3.15A 250V
UL,JAPAN T6.3A 250V
T500mA 250V
T4A 250V
marantz



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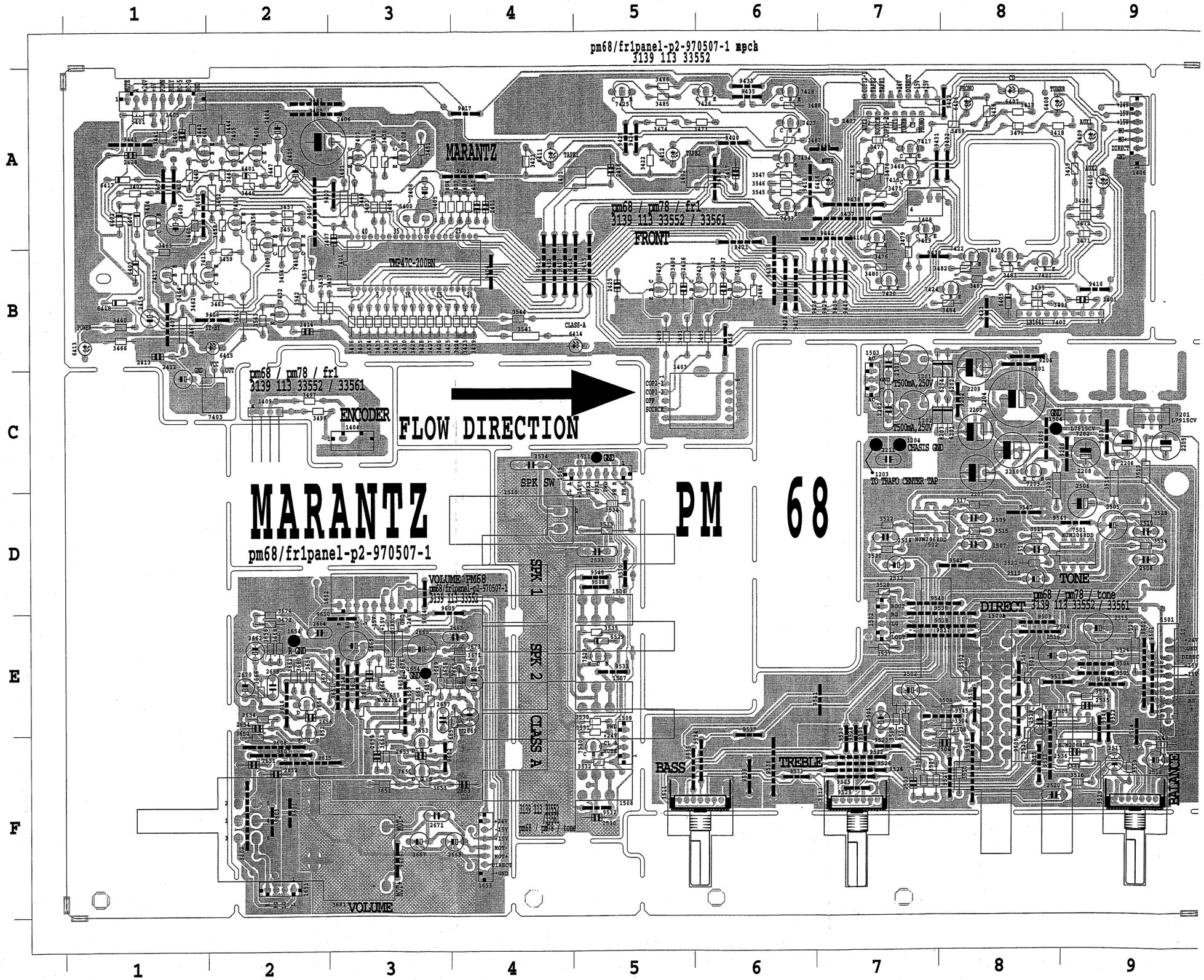
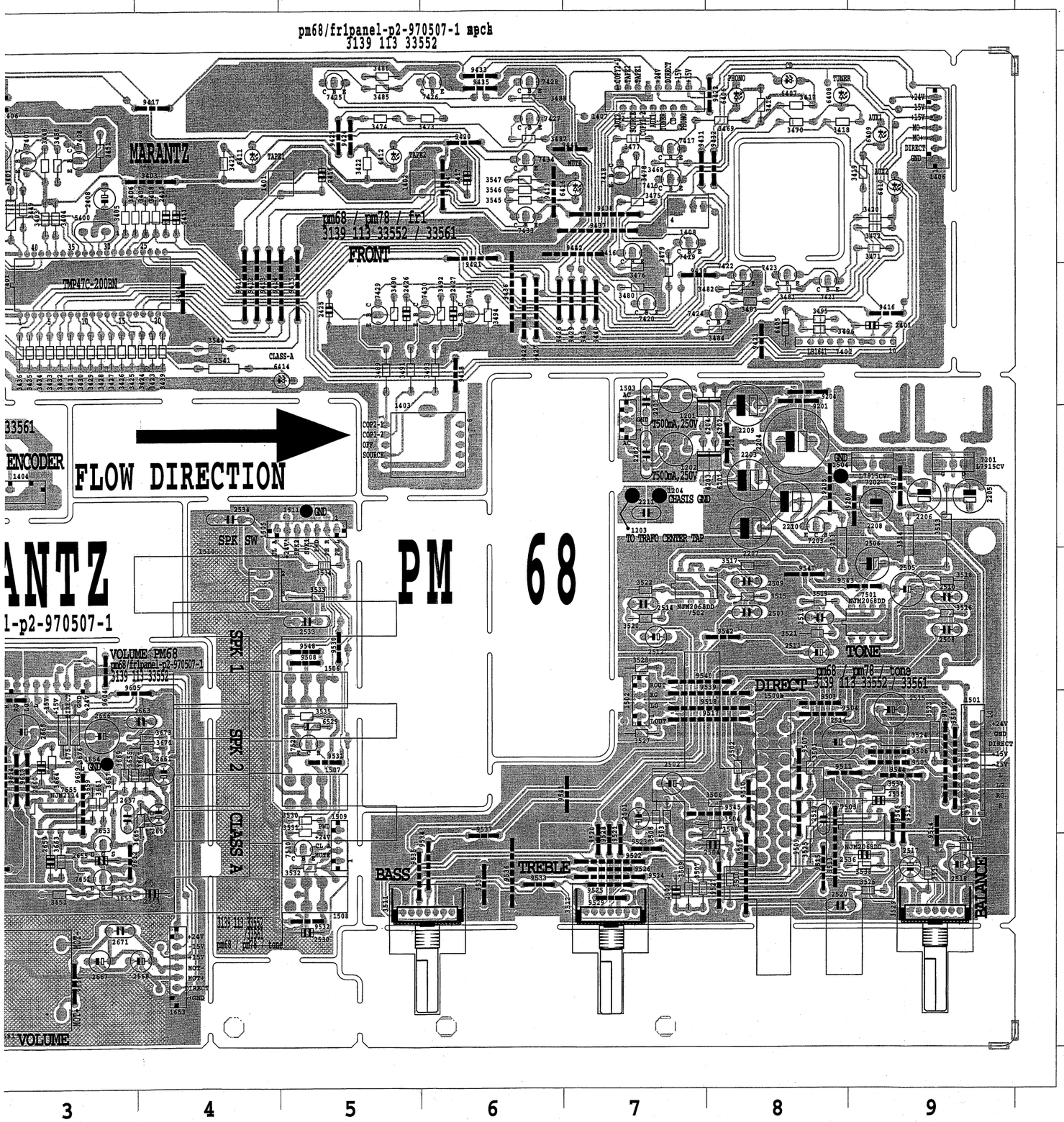
CONTROL BOARD (PM-68)





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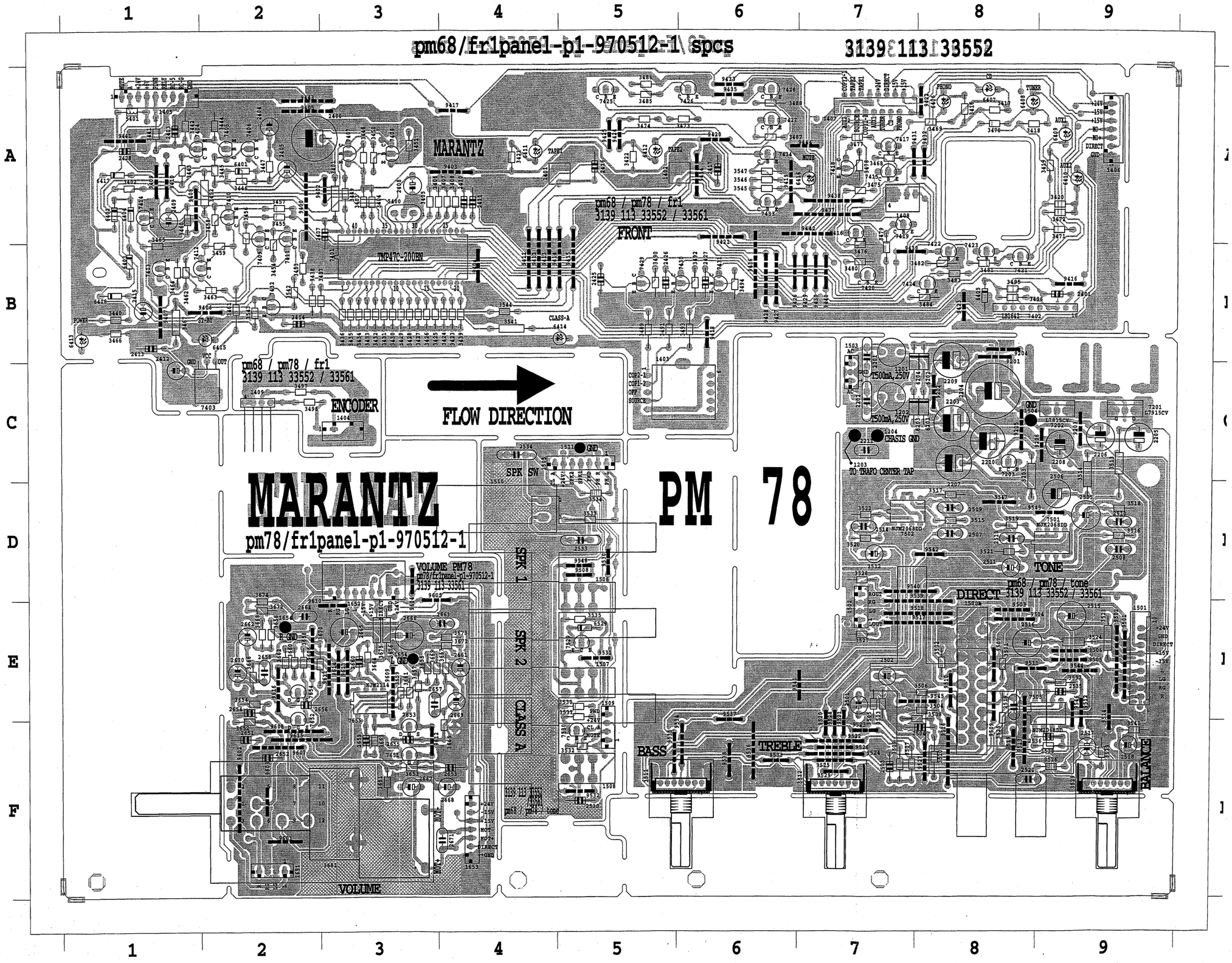
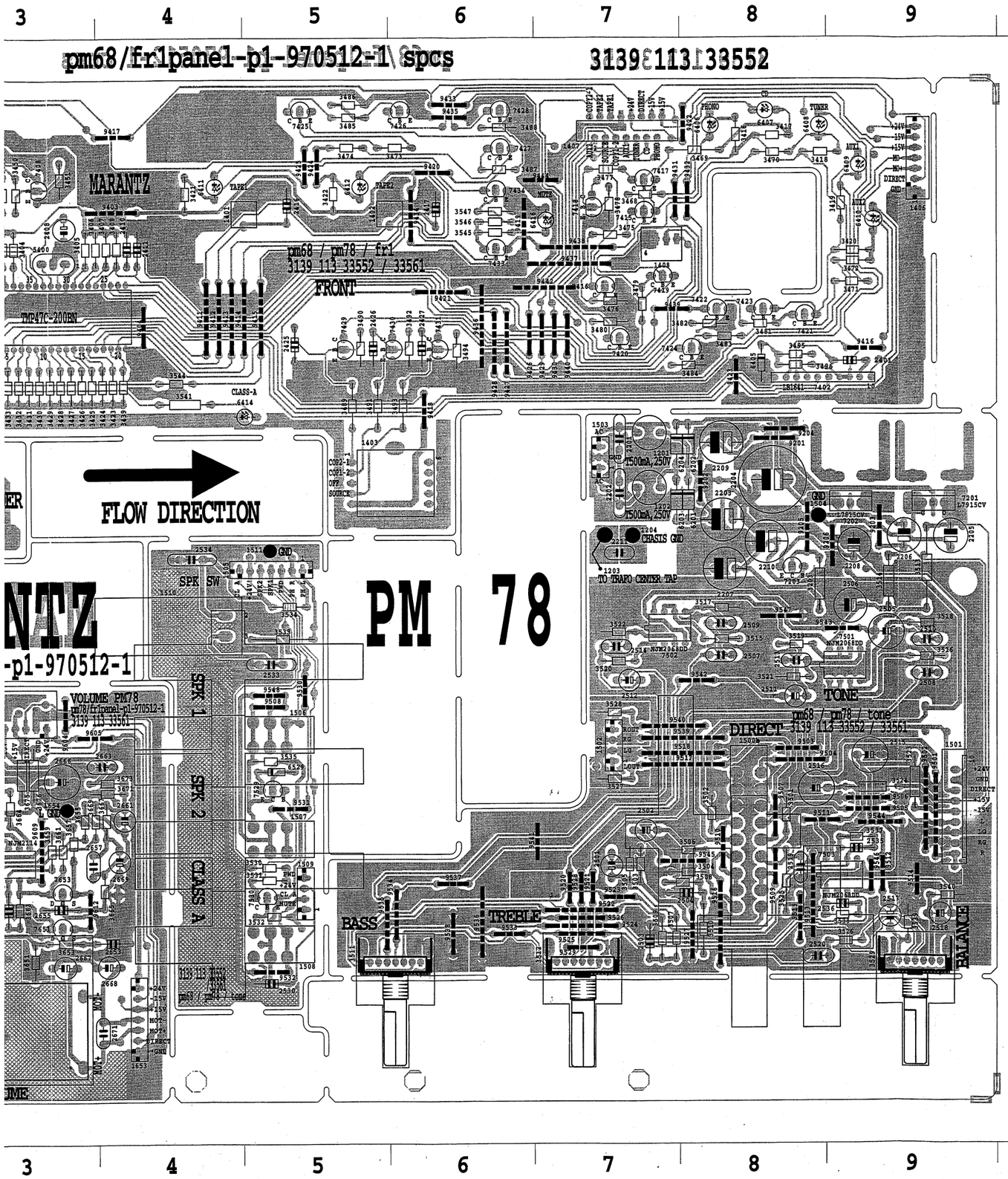
CONTROL BOARD (PM-78)





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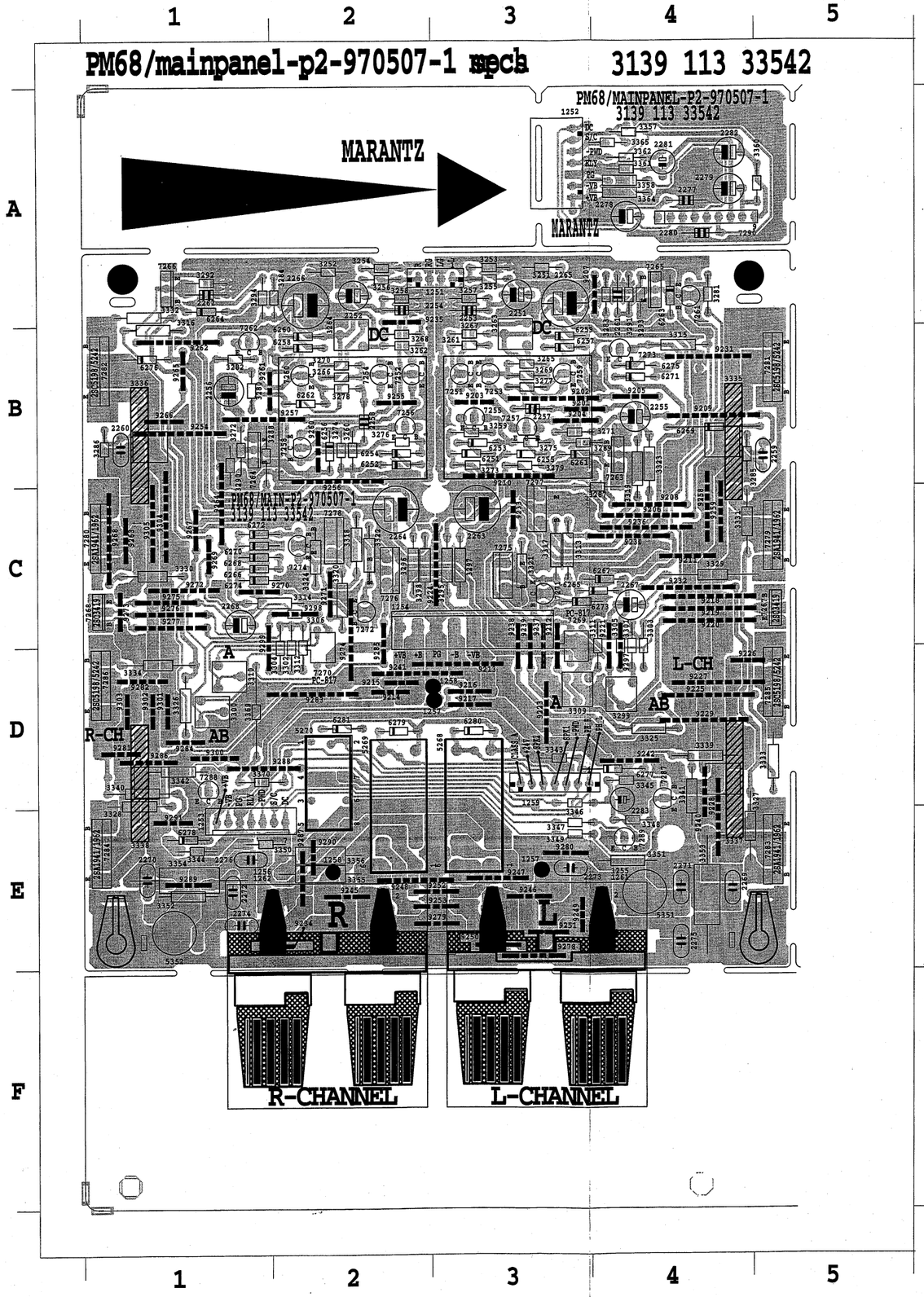
	3516 D 9	9522 F 7	3429 B 3	7401 B 3		

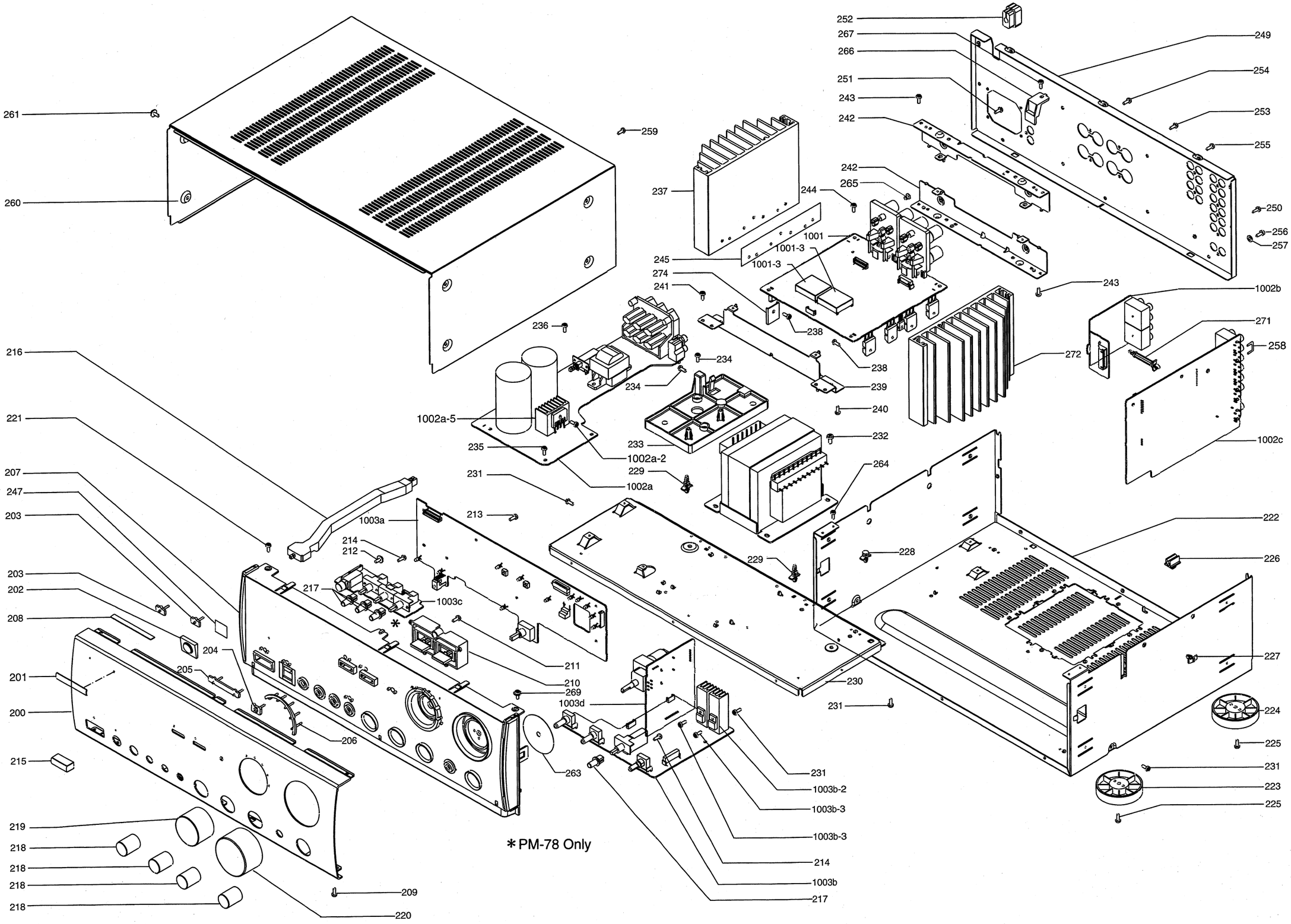
AIN BOARD



1251	A 3	3304	D 2	6281	D 2	9256	B 2
1252	A 3	3305	D 4	7251	B 3	9257	B 1
1253	E 1	3306	C 2	7252	B 2	9258	C 4
1254	C 3	3309	D 3	7253	B 3	9259	C 4
1255	F 3	3310	D 1	7254	B 2	9260	B 2
1256	F 2	3311	D 4	7255	B 3	9261	B 1
1259	D 3	3312	D 2	7256	B 2	9262	B 1
1261	F 3	3313	C 3	7257	B 3	9263	C 1
1262	F 2	3314	C 2	7258	B 2	9264	C 1
2251	A 3	3315	B 4	7259	B 3	9265	B 1
2252	A 2	3316	B 1	7260	B 2	9266	B 1
2253	A 3	3317	C 3	7261	A 4	9267	C 1
2254	A 2	3318	C 2	7262	B 1	9268	C 1
2255	B 4	3319	B 4	7263	B 4	9269	C 1
2256	B 1	3320	C 2	7264	B 1	9270	C 1
2257	B 3	3321	C 3	7265	A 4	9271	C 2
2258	B 2	3322	C 2	7266	A 1	9272	C 1
2259	B 5	3323	B 4	7267	C 5	9273	C 1
2260	B 1	3324	C 2	7268	C 1	9274	C 2
2261	A 4	3325	D 4	7269	D 3	9275	C 1
2262	A 1	3326	D 1	7270	D 2	9276	C 1
2263	C 3	3327	E 4	7271	C 3	9277	C 1
2264	C 2	3328	D 1	7272	C 2	9278	E 3
2265	A 3	3329	C 4	7273	B 4	9279	E 3
2266	A 2	3330	C 1	7274	C 2	9280	E 3
2267	C 4	3331	C 4	7275	C 3	9281	D 1
2268	C 1	3332	A 1	7276	C 2	9282	D 1
2269	E 4	3333	D 5	7277	C 3	9283	D 2
2270	E 1	3334	D 1	7278	C 2	9284	D 1
2271	E 4	3335	B 4	7279	C 5	9285	C 2
2272	E 1	3336	B 1	7280	C 1	9286	D 1
2273	E 3	3337	D 4	7281	B 5	9287	E 2
2274	E 1	3338	D 1	7282	B 1	9288	D 1
2275	E 4	3339	D 4	7283	E 5	9289	E 1
2276	E 1	3340	D 1	7284	E 1	9290	E 2
2277	A 4	3341	D 4	7285	D 5	9291	E 1
2278	A 4	3342	D 1	7286	D 1	9297	D 4
2279	A 4	3343	D 3	7287	D 4	9298	C 2
2280	A 4	3344	E 1	7288	D 1	9299	D 1
2281	A 4	3345	D 4	7289	E 4	9300	D 1
2282	A 4	3346	D 3	7290	A 4	9301	D 1
2283	D 4	3347	E 3	9201	B 3	9302	D 1
3251	A 3	3348	E 4	9202	B 3	9303	D 1
3252	A 2	3349	E 3	9203	B 3	9304	C 1
3253	A 3	3350	E 1	9204	B 3	9305	C 1
3254	A 2	3351	E 4	9205	B 4	----	
3255	A 3	3352	E 1	9206	C 4		
3256	A 2	3353	E 4	9207	A 4		
3257	A 3	3354	E 1	9208	C 4		
3258	A 2	3355	E 2	9209	B 4		
3259	B 3	3356	E 2	9210	B 3		
3260	B 2	3357	A 4	9211	C 4		
3261	B 3	3358	A 4	9212	D 3		
3262	B 2	3360	A 5	9213	D 3		
3263	B 3	3361	A 4	9214	D 2		
3264	B 2	3362	A 4	9215	D 2		
3265	B 3	3364	A 4	9216	D 3		
3266	B 2	3365	A 4	9217	D 3		
3267	B 3	3369	D 1	9218	C 4		
3268	B 2	3370	D 1	9219	C 4		
3269	B 3	5268	E 3	9220	C 4		
3270	B 2	5269	E 2	9221	D 4		
3271	B 3	5270	D 2	9223	D 3		
3272	B 1	5351	E 4	9224	C 3		
3273	B 3	5352	E 1	9225	D 4		
3274	B 2	6251	B 3	9226	D 4		
3275	B 3	6252	B 2	9227	D 4		
3276	B 2	6253	B 3	9228	E 4		
3277	B 3	6254	B 2	9229	D 4		
3278	B 2	6255	B 3	9230	C 4		
3279	B 3	6256	B 2	9231	B 4		
3280	B 1	6257	B 3	9232	C 4		
3281	A 4	6258	B 2	9233	C 3		
3282	B 1	6259	B 3	9234	E 2		
3283	A 4	6260	B 2	9235	A 2		
3284	A 2	6261	B 3	9236	C 4		
3285	B 4	6262	B 2	9237	D 3		
3286	B 1	6263	A 4	9238	D 3		
3287	C 4	6264	A 1	9239	D 3		
3288	B 1	6265	C 4	9240	D 4		
3289	B 3	6266	C 1	9241	D 2		
3290	B 1	6267	C 4	9242	D 4		
3291	A 4	6268	C 1	9243	D 3		
3292	A 1	6269	B 4	9244	D 3		
3293	A 4	6270	C 1	9245	E 2		
3294	A 1	6271	B 4	9246	E 3		
3295	C 3	6272	C 1	9247	E 3		
3296	C 2	6273	C 3	9248	E 2		
3297	C 3	6274	C 1	9249	E 3		
3298	C 2	6275	B 4	9250	E 3		
3299	D 4	6276	B 1	9251	E 3		
3300	D 1	6277	D 4	9252	E 3		
3301	D 4	6278	E 1	9253	E 3		
3302	D 2	6279	D 2	9254	B 1		
3303	D 4	6280	D 3	9255	B 2		

7. EXPLODED VIEW AND PARTS LIST

EXPLODED VIEW



*PM-78 Only

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, **:EUROPE) **PM-68**

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
384		4822 219 10318	RC-HANDSET RC-68PM	QP21910318
⚠385	/02	4822 321 10809	MAINS CORD 250V 2.5A	QP32110809
⚠385	F	4822 321 11349	MAINS CORD 125V 12A	QP32111349
⚠385	U	4822 321 10849	MAINS CORD 125V 10A	QP32110849
387	/02	4822 736 15481	DFU FOR /02	QP73615481
387	F	4822 736 15615	DFU FOR F	QP73615615
387	U	4822 736 15602	DFU FOR U	QP73615602
200	/02B,FB UBL	4822 459 04652	FRONT PANEL BL	214W248010
200	/02G FN	4822 459 04653	FRONT PANEL GL	214W248020
201	/02B,FB UBL	4822 454 11825	MARANTZ BADGE BL	185J251012
201	/02G FN	4822 459 11211	MARANTZ BADGE GL	185J251112
202		4822 450 10372	IR LENS	QP45010372
203		4822 380 10203	LENS STANDBY	QP38010203
204		4822 380 10204	LENS MUTE	QP38010204
205		4822 380 10205	LENS TAPE MONITOR	QP38010205
206		4822 380 10206	LENS FUNCTION	QP38010206
207	/02B,FB UBL	4822 459 04703	FRONT CHASSIS BL	QP45904703
207	/02G FN	4822 459 04705	FRONT CHASSIS GL	QP45904705
210	/02B,FB UBL	4822 410 11261	BUTTON TAPE MONITOR BL	QP41011261
210	/02G FN	4822 410 11262	BUTTON TAPE MONITOR GL	QP41011262
215	/02B,FB UBL	4822 462 72053	POWER BUTTON BL	QP46272053
215	/02G FN	4822 462 72053	POWER BUTTON GL	QP46272053
217	/02B,FB UBL	4822 410 60343	SPK BUTTON BL	058J270030
217	/02G FN	4822 410 11263	SPK BUTTON GL	058J270230
218	/02B,FB UBL	4822 413 41678	TONE KNOB BL	025J154080
218	/02G FN	4822 410 11264	TONE KNOB GL	025J154190
219	/02B,FB UBL	4822 413 41745	SELECTOR KNOB BL	064J154100
219	/02G FN	4822 410 11265	SELECTOR KNOB GL	064J154150
220	/02B,FB UBL	4822 410 10559	VOLUME KNOB BL	063J154080
220	/02G FN	4822 410 11266	VOLUME KNOB GL	063J154190
223		4822 462 42129	LEG FRONT	QP46242129
224		4822 462 42131	LEG REAR	QP46242131
⚠252		4822 532 60948	MAINS CORD BUSH	QP53260948
1605		4822 323 10406	FLEX CABLE 15P	QP32310406
⚠5011	/02	4822 146 10823	MAINS TRSF.EI96-60T	QP14610823
⚠5011	F	4822 146 10859	MAINS TRSF.EI96-60T	QP14610859
⚠5011	U	4822 146 10854	MAINS TRSF.EI96-60T	QP14610854
	/02B,FB UBL		PACKING CASE (3139 116 37750)	214W801010
	/02G FN		PACKING CASE (3139 116 38460)	214W801020
			CUSHION (3139 116 24990)	232W809010

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, **:EUROPE) **PM-78**

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
384		4822 219 10318	RC-HANDSET RC-68PM	QP21910318
⚠385	/02	4822 321 10809	MAINS CORD 250V 2.5A	QP32110809
⚠385	F	4822 321 11349	MAINS CORD 125V 12A	QP32111349
387	/02	4822 736 15481	DFU FOR /02	QP73615481
387	F	4822 736 15615	DFU FOR F	QP73615615
200	/02B,FB	4822 459 04702	FRONT PANEL BL	232W248010
200	/02G FN	4822 459 04704	FRONT PANEL GL	232W248020
201	/02B,FB	4822 454 11825	MARANTZ BADGE BL	185J251012
201	/02G FN	4822 459 11211	MARANTZ BADGE GL	185J251112
202		4822 450 10372	IR LENS	QP45010372
203		4822 380 10203	LENS STANDBY	QP38010203
204		4822 380 10204	LENS MUTE	QP38010204
205		4822 380 10205	LENS TAPE MONITOR	QP38010205
206		4822 380 10206	LENS FUNCTION	QP38010206
207	/02B,FB	4822 459 04703	FRONT CHASSIS BL	QP45904703
207	/02G FN	4822 459 04705	FRONT CHASSIS GL	QP45904705
210	/02B,FB	4822 410 11261	BUTTON TAPE MONITOR BL	QP41011261
210	/02G FN	4822 410 11262	BUTTON TAPE MONITOR GL	QP41011262
215	/02B,FB	4822 462 72053	POWER BUTTON BL	QP46272053
215	/02G FN	4822 462 72053	POWER BUTTON GL	QP46272053
217	/02B,FB	4822 410 60343	SPK BUTTON BL	058J270030
217	/02G FN	4822 410 11263	SPK BUTTON GL	058J270230
218	/02B,FB	4822 413 41678	TONE KNOB BL	025J154080
218	/02G FN	4822 410 11264	TONE KNOB GL	025J154190
219	/02B,FB	4822 413 41745	SELECTOR KNOB BL	064J154100
219	/02G FN	4822 410 11265	SELECTOR KNOB GL	064J154150
220	/02B,FB	4822 410 10559	VOLUME KNOB BL	063J154080
220	/02G FN	4822 410 11266	VOLUME KNOB GL	063J154190
223		4822 462 42129	LEG FRONT	QP46242129
224		4822 462 42131	LEG REAR	QP46242131
⚠252		4822 532 60948	MAINS CORD BUSH	QP53260948
1605		4822 323 10406	FLEX CABLE 15P	QP32310406
⚠5011	/02	4822 146 10844	MAINS TRSF.EI96-60T	QP14610844
⚠5011	F	4822 146 10853	MAINS TRSF.EI96-60T	QP14610853
	/02B,FB		PACKING CASE (3139 116 37770)	232W801010
	/02G FN		PACKING CASE (3139 116 38470)	232W801020
			CUSHION (3139 116 24990)	232W809010

8. IDLING CURRENT AND DC OFFSET VOLTAGE ALIGNMENT

8.1 Quiescent Current Adjustment for Class AB

-Set to CD mode with no input, minimum volume position & mains supply at 230 V ±5 %.

-Power up the unit, adjust **SLOWLY** 3299 (L) & 3300 (R) until voltage across L-Channel -----3335 (T007 / T006) & 3337 (T009 / T010), R-Channel ----- 3336 (T013 / T014) & 3338 (T015 / T016) is as per the table below.

Time	Voltege
after 30 sec to 1 min*	≥ 0.3 mV to < 0.4 mV

- After 30 min, the voltage should settle down to 18 mV ± 3 mV.

* Start from cold condition.

8.2 Quiescent Current Adjustment for Class A.

- Next, switch to Class A operation. Adjust **SLOWLY** 3309 (L) & 3310 (R) until voltage across L-Channel ----- 3335 (T007 / T006) & 3337 (T009 / T010) , R-Channel ----- 3336 (T013 / T014) & 3338 (T015 / T016) is as per the table below.

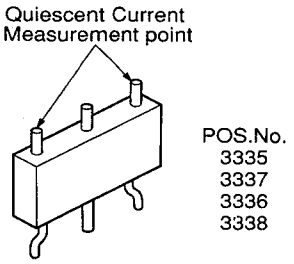
Time	Voltage
after 0 sec to 30 sec**	≥ 65 mV to <70 mV

- After 30 min, the voltage should settle down to 90 mV ± 5 mV.

** Continue immediately after 8.1

REMARKS:

- Please take note that for both Class AB & A alignment, at all time during adjustment, refer to the higher reading of each channel.



8.3 DC Offset.

- Adjust 3263 and 3264 until DC offset voltage is less than ±10 mV at Speaker output terminal.

8. アイドリング電流およびDCオフセット電圧調整

8.1 アイドリング電流調整（Class AB）

1) 本体の電源スイッチを入れる前に、ボリュームを最小に、バランス及びトーンコントロールをセンターに合わせます。
2) CDモードにし、電源電圧を100Vにします。
3) セメント抵抗、3335 (T0007 / T0006)、3337 (T0009 /T0010) のLチャンネルと3336 (T0013 / T0014)、3338(T0015/T0016) のRチャンネル各々の電圧が下記の値になるまで、半固定抵抗3299 (L) と3300 (R) をゆっくり調整します。

時間	電圧
30秒ー1分*	0.3mV以上0.4mV以下

30分後、電圧は18mV ± 3mVに安定します。

*冷却状態からスタートします。

8.2 アイドリング電流調整（Class A）

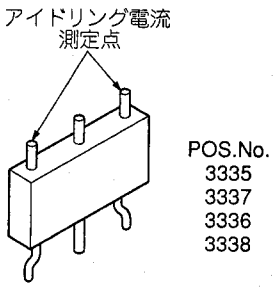
1) Aクラス動作に切り換えます。
2) セメント抵抗3335 (T0007 / T0006)、3337 (T0009 / T0010) のLチャンネルと3336 (T0013 / T0014)、3338(T0015 / T0016)のRチャンネル各々の電圧が下記の値になるまで、半固定抵抗3309 (L) と3310 (R) ゆっくり調整します。

時間	電圧
0秒ー30秒 **	65mV以上70mV以下

30分後、電圧は90mV ± 5mVに安定します。

**切換え後、すぐに行ってください。

注意：Aクラス動作及びABクラス動作のアイドリング電流調整において、同チャンネル内の2ケ所の測定点で指示値に差異があった場合は、高い方の電圧値が調整範囲内となるようにします。



8.3 DCオフセット電圧調整

DCオフセット電圧が、スピーカー出力端子で10mV以下になるまで半固定抵抗3263と3264を調整します。

11. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTORS

R*** : 1) GD05 × × × 140, Carbon film fixed resistor, ±5% 1/4W
R*** : 2) GD05 × × × 160, Carbon film fixed resistor, ±5% 1/6W
① —— Resistance value

Examples ;
① Resistance value

0.1Ω 001	10Ω ... 100	1kΩ 102	100kΩ 104
0.5Ω 005	18Ω ... 180	2.7kΩ 272	680kΩ 684
1Ω 010	100Ω ... 101	10kΩ 103	1MΩ 105
6.8Ω 068	390Ω ... 391	22kΩ 223	4.7MΩ 475

Note : Please distinguish 1/4W from 1/6W by the shape of parts used actually.

CAPACITORS

C*** : CERAMIC CAP.
3) DD1 × × × × 370, Ceramic capacitor
② ③ Disc type
Temp.coeff.P350 ~ N1000, 50V
③ —— Capacity value
② —— Tolerance

Examples ;
② Tolerance (Capacity deviation)
±0.25pF 0
±0.5pF 1
±5% 5
* Tolerance of COMMON PARTS handled here are as follows :
0.5pF ~ 5pF ... ±0.25pF
6pF ~ 10pF ... ±0.5pF
12pF ~ 560pF ... ±5%
③ Capacity value

0.5pF ... 005	3pF ... 030	100pF ... 101
1pF ... 010	10pF ... 100	220pF ... 221
1.5pF ... 015	47pF ... 470	560pF ... 561

C*** : CERAMIC CAP.
4) DK16 × × × 300, High dielectric constant ceramic capacitor
④ Disc type
Temp.chara. 2B4, 50V
④ —— Capacity value

Examples ;
④ Capacity value

100pF ... 101	1000pF 102	10000pF ... 103
470pF ... 471	2200pF 222	

C*** : 5) ELECTROLY CAP. (⏚), 6) FILM CAP. (⏚)
5) EA × × × × × × 10, Electrolytic capacitor
⑤ ⑥ One-way lead type, Tolerance ±20%
⑥ —— Working voltage
⑤ —— Capacity value

Examples ;
⑤ Capacity value

0.1μF 104	4.7μF ... 475	100μF ... 107
0.33μF 334	10μF ... 106	330μF ... 337
1μF 105	22μF ... 226	1100μF ... 118
		2200μF ... 228

⑥ Working voltage

6.3V 006	25V ... 025
10V 010	35V ... 035
16V 016	50V ... 050

6) DF15 × × × 350 → Plastic film capacitor
DF15 × × × 310 → One-way type, Mylar ±5% 50V
DF16 × × × 310 → Plastic film capacitor
One-way type, Mylar ±10% 50V
⑦ —— Capacity value

Examples ;
⑦ Capacity value

0.001μF (1000pF) 102	0.1μF 104
0.0018μF 182	0.56μF 564
0.01μF 103	1μF 105
0.015μF 153	

NOTE : 1) The above CODES (R***, R***, C***, C*** and C***) are omitted on the schematic diagram in some case.
2) On the occasion, be confirmed the common parts on the parts list.
3) Refer to "Common Parts List" for the other common parts (**RI05, DD4, DK4**).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows;
1. KOA Corporation

Part No. (MJI)	Type No. (KOA)	Description
NH05 × × × 140	→ RF25S × × × × ΩJ	(±5% 1/4W)
NH05 × × × 120	→ RF50S × × × × ΩJ	(±5% 1/2W)
NH85 × × × 110	→ RF73B2A × × × × ΩJ	(±5% 1/10W)
NH95 × × × 140	→ RF73B2E × × × × ΩJ	(±5% 1/4W)

* Resistance value — Resistance value (0.1 – 10kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No. (MJI)	Type No. (MEC)	Description
NF05 × × × 140	→ ERD-2FCJ × × ×	(±5% 1/4W)
RF05 × × × 140		
NF02 × × × 140	→ ERD-2FCG × × ×	(±2% 1/4W)
RF02 × × × 140		

* Resistance value — * Resistance value

Examples ;
* Resistance value

0.1Ω 001	10Ω ... 100	1kΩ 102	100kΩ 104
0.5Ω 005	18Ω ... 180	2.7kΩ 272	680kΩ 684
1Ω 010	100Ω ... 101	10kΩ 103	1MΩ 105
6.8Ω 068	390Ω ... 391	22kΩ 223	4.7MΩ 475

ABBREVIATION AND MARKS

ANT.	: ANTENNA	BATT.	: BATTERY
CAP.	: CAPACITOR	CER.	: CERAMIC
CONN.	: CONNECTING	DIG.	: DIGITAL
HP	: HEADPHONE	MIC.	: MICROPHONE
μ-PRO	: MICROPROCESSOR	REC.	: RECORDING
RES.	: RESISTOR	SPK	: SPEAKER
SW	: SWITCH	TRANSF.	: TRANSFORMER
TRIM.	: TRIMMING	TRS.	: TRAMSISTOR
VAR.	: VARIABLE	X'TAL	: CRYSTAL

NOTE ON SAFETY :

Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol ⚠. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意 :

⚠ がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, **:EUROPE)

POS. NO.	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
			FUNCTION CIRCUIT BOARD	
			CAPACITORS	
▲2551		4822 126 12147	CER. 22nF ±10% Y5R 25V	QP12612147
▲2552		4822 126 12147	CER. 22nF ±10% Y5R 25V	QP12612147
2553		4822 122 33519	CER. 470pF ±10% 50V	QP12233519
2554		4822 122 33519	CER. 470pF ±10% 50V	QP12233519
▲2555	/02	4822 122 33169	CER. 680pF ±10% 50V	QP12233169
2555	F,U	4822 122 33849	CER. 150pF ±10% Y5P 50V	QP12233849
▲2556	/02	4822 122 33169	CER. 680pF ±10% 50V	QP12233169
2556	F,U	4822 122 33849	CER. 150pF ±10% Y5P 50V	QP12233849
2559		4822 124 12023	ELECT 47µF ±20% 25V	QP12412023
2560		4822 124 12023	ELECT 47µF ±20% 25V	QP12412023
2561		4822 121 70654	FILM 2.2nF ±10% 50V	QP12170654
2562		4822 121 70654	FILM 2.2nF ±10% 50V	QP12170654
2563		4822 121 51399	FILM 47nF ±10% 50V	QP12151399
2564		4822 121 51399	FILM 47nF ±10% 50V	QP12151399
2565		4822 121 10685	FILM 1.8nF ±10% 50V	QP12110685
2566		4822 121 10685	FILM 1.8nF ±10% 50V	QP12110685
2567		4822 121 41935	FILM 12nF ±5% 250V	QP12141935
2568		4822 121 41935	FILM 12nF ±5% 250V	QP12141935
2569		4822 124 12024	ELECT 10µF ±20% 16V	QP12412024
2570		4822 124 12024	ELECT 10µF ±20% 16V	QP12412024
2571		4822 121 10696	FILM 4.7nF ±2% 50V	QP12110696
2572		4822 121 10696	FILM 4.7nF ±2% 50V	QP12110696
2573		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2574		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2575		4822 124 40248	ELECT 10µF ±20% 63V	QP12440248
▲2601				
∫		4822 126 12147	CER. 22nF ±10% Y5R 25V	QP12612147
▲2612				
2613				
∫		4822 122 33849	CER. 150pF ±10% Y5P 50V	QP12233849
2624				
2647				
∫		4822 124 40248	ELECT 10µF ±20% 63V	QP12440248
2656				
2659		4822 124 80196	ELECT 47µF ±20% 50V	QP12480196
			RESISTORS	
3551		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3552		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3553		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3554		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3555				
∫		4822 116 52283	4.7kΩ ±5% 0.5W	QP11652283
3560				
3561		4822 116 52206	120Ω ±5% 0.5W	QP11652206
3562		4822 116 52206	120Ω ±5% 0.5W	QP11652206
3563		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3564		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3565		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3566		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3567		4822 116 52289	5.6kΩ ±5% 0.5W	QP11652289
3568		4822 116 52289	5.6kΩ ±5% 0.5W	QP11652289
3569		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3570		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3571		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3572		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3573		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3574		4822 116 83872	220Ω ±5% 0.5W	QP11683872

POS. NO.	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
▲3575		4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲3576		4822 052 10479	47Ω ±5% 0.33W	QP05210479
3601				
∫		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3618		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3633		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3634		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3635		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3637		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
			SEMICONDUCTORS	
▲6605		4822 130 30621	DIODE 1N4148	QP13030621
▲6608		4822 130 30621	DIODE 1N4148	QP13030621
7551		4822 130 63122	TRS. 2SK369BL	QP13063122
7552		4822 130 63122	TRS. 2SK369BL	QP13063122
7553		4822 130 63122	TRS. 2SK369BL	QP13063122
7554		4822 130 63122	TRS. 2SK369BL	QP13063122
7555		4822 209 31153	IC NJM2114D	QP20931153
7601		4822 130 44568	TRS. BC557B	QP13044568
7602		4822 130 40959	TRS. BC547B	QP13040959
			MISCELLANEOUS	
1551		4822 265 10311	TERMINAL 2P RCA JACK	QP26510311
1601		4822 265 10311	TERMINAL 2P RCA JACK	QP26510311
1602	PM-68	4822 267 20453	TERMINAL 6P RCA JACK	QP26720453
1602	PM-78	4822 265 11061	TERMINAL 6P RCA JACK	QP26511061
1603	PM-68	4822 267 31452	TERMINAL 4P RCA JACK	QP26731452
1603	PM-78	4822 265 30996	TERMINAL 4P RCA JACK	QP26530996
1604		4822 267 50915	CONNECTOR,15P WIRE	QP26750915
▲5551		4822 280 20501	RELAY MR62-24SR	QP28020501
▲5601				
∫		4822 280 20501	RELAY MR62-24SR	QP28020501
▲5612				
			TAPE IN / OUT	
			CIRCUIT BOARD	
			CAPACITORS	
▲2631				
∫		4822 126 12147	CER. 22nF ±10% Y5R 25V	QP12612147
▲2638				
2639				
∫		4822 122 33849	CER. 150pF ±10% Y5P 50V	QP12233849
2646				
			RESISTORS	
3621				
∫		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3628				
3629				
∫		4822 116 83883	470Ω ±5% 0.5W	QP11683883
3632				
			MISCELLANEOUS	
1611	PM-68	4822 267 31452	TERMINAL 4P RCA JACK	QP26731452
1611	PM-78	4822 265 30996	TERMINAL 4P RCA JACK	QP26530996
1612	PM-68	4822 267 31452	TERMINAL 4P RCA JACK	QP26731452
1612	PM-78	4822 265 30996	TERMINAL 4P RCA JACK	QP26530996
			VOLUME CIRCUIT BOARD	
			CAPACITORS	
▲2653		4822 122 33195	CER. 100pF ±10% 50V	QP12233195
▲2654		4822 122 33195	CER. 100pF ±10% 50V	QP12233195

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POS. NO.	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
2657		4822 126 11948	CER. 22pF ±5% 50V	QP12611948
2658		4822 126 11948	CER. 22pF ±5% 50V	QP12611948
▲2659		4822 126 12339	CER. 2.2nF ±10% Y5R	QP12612339
▲2660		4822 126 12339	CER. 2.2nF ±10% Y5R	QP12612339
2661		4822 124 12026	ELECT 22µF ±20% 25V	QP12412026
2662		4822 124 12026	ELECT 22µF ±20% 25V	QP12412026
2663		4822 121 10686	FILM 4.7nF ±10% 50V	QP12110686
2664		4822 121 10686	FILM 4.7nF ±10% 50V	QP12110686
2665		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2666		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
▲2667		4822 124 40246	ELECT 4.7µF ±20% 63V	QP12440246
▲2668		4822 124 40246	ELECT 4.7µF ±20% 63V	QP12440246
2669		4822 124 12027	ELECT 2.2µF ±20% 50V	QP12412027
2670		4822 124 12027	ELECT 2.2µF ±20% 50V	QP12412027
2671		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
			RESISTORS	
3651	PM-68	4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3651	PM-78	4822 116 52244	15kΩ ±5% 0.5W	QP11652244
3652	PM-68	4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3652	PM-78	4822 116 52244	15kΩ ±5% 0.5W	QP11652244
3653		4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3654		4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3655	PM-68	4822 116 52206	120Ω ±5% 0.5W	QP11652206
3655	PM-78	4822 116 83876	270Ω ±5% 0.5W	QP11683876
3656	PM-68	4822 116 52206	120Ω ±5% 0.5W	QP11652206
3656	PM-78	4822 116 83876	270Ω ±5% 0.5W	QP11683876
3657				
∫		4822 116 52283	4.7kΩ ±5% 0.5W	QP11652283
3662				
3663		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3664		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3665		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3666		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3667	PM-68	4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3667	PM-78	4822 116 52256	2.2kΩ ±5% 0.5W	QP11652256
3668	PM-68	4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3668	PM-78	4822 116 52256	2.2kΩ ±5% 0.5W	QP11652256
3669		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3670		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3671		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3672		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3673		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3674		4822 116 83872	220Ω ±5% 0.5W	QP11683872
▲3675		4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲3676		4822 052 10479	47Ω ±5% 0.33W	QP05210479
3681	PM-68	4822 101 11789	VARIABLE 50kΩ	QP10111789
3681	PM-78	4822 101 11803	VARIABLE 50kΩ	QP10111803
			SEMICONDUCTORS	
7651				
∫		4822 130 63122	TRS. 2SK369BL	QP13063122
7654				
7655		4822 209 31153	IC NJM2114D	QP20931153
			FRONT CIRCUIT BOARD	
			CAPACITORS	
▲2401		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
▲2403		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
2404		4822 124 81151	ELECT 22µF 50V	QP12481151
2405		4822 124 81151	ELECT 22µF 50V	QP12481151
2406		4822 124 80818	ELECT 22000µF 5.5V	QP12480818

POS. NO.	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
▲2407		4822 126 12882	CER. 100nF+80% -20% 50V	QP12612882
2408		4822 124 81151	ELECT 22µF 50V	QP12481151
2409		4822 124 81151	ELECT 22µF 50V	QP12481151
▲2410		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
▲2411		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
2412		4822 124 81151	ELECT 22µF 50V	QP12481151
▲2413		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
▲2414		4822 126 12882	CER. 100nF+80% -20% 50V	QP12612882
2415		4822 124 81151	ELECT 22µF 50V	QP12481151
▲2416		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
▲2417		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
▲2425				
∫		4822 126 12882	CER. 100nF+80% -20% 50V	QP12612882
▲2428				
			RESISTORS	
▲3401		4822 052 10101	100Ω ±5% 0.33W	QP05210101
3402		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3403				
∫		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3407				
3408		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3416				
∫		4822 116 52222	390Ω ±5% 0.5W	QP11652222
3422				
3423				
∫		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3426				
3427				
∫		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3436				
3437		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3438		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3439		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3440		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3441		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3442		4822 116 52271	33kΩ ±5% 0.5W	QP11652271
3443		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3444		4822 116 52283	4.7kΩ ±5% 0.5W	QP11652283
3445		4822 116 52256	2.2kΩ ±5% 0.5W	QP11652256
3446		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3447		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3448				
∫		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3451				
▲3452		4822 052 10101	100Ω ±5% 0.33W	QP05210101
3453				
∫		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3459				
3460		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3461		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3462		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3463		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3464		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3465		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3466		4822 116 52195	47Ω ±5% 0.5W	QP11652195
▲3467		4822 052 10101	100Ω ±5% 0.33W	QP05210101
3468				
∫		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3488				
3489		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3490		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3491		4822 116 83884	47kΩ ±5% 0.5W	QP11683884

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POS. NO.	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
3492		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3493		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3494		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3495		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3496		4822 116 52256	2.2kΩ ±5% 0.5W	QP11652256
▲3541	PM-78	4822 053 10332	3.3kΩ ±5% 1W	QP05310332
3542		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3543		4822 116 52222	390Ω ±5% 0.5W	QP11652222
3544		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3545		4822 116 52222	390Ω ±5% 0.5W	QP11652222
3546		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
3547		4822 116 83864	10kΩ ±5% 0.5W	QP11683864
			SEMICONDUCTORS	
▲6401				
∫		4822 130 30621	DIODE 1N4148	QP13030621
▲6404				
6405		4822 130 34174	DIODE BZX79-B4V7	QP13034174
6406				
∫		4822 130 10792	LED LTL-1CHPE	QP13010792
6413				
6414	PM-78	4822 130 10792	LED LTL-1CHPE	QP13010792
6415		4822 130 10792	LED LTL-1CHPE	QP13010792
6416		4822 130 10792	LED LTL-1CHPE	QP13010792
▲6417		4822 130 30621	DIODE 1N4148	QP13030621
▲6418		4822 130 30621	DIODE 1N4148	QP13030621
7401		4822 209 15719	μ-PRO TMP47C200BN-G929	QP20915719
7402		4822 209 30193	IC LB1641	QP20930193
7403		4822 130 10165	IR-EYE GP1U28XP	QP13010165
7404		4822 130 40959	TRS. BC547B	QP13040959
7405		4822 130 40959	TRS. BC547B	QP13040959
7406		4822 130 40959	TRS. BC547B	QP13040959
7407		4822 130 44568	TRS. BC557B	QP13044568
7408		4822 130 40959	TRS. BC547B	QP13040959
7409				
∫		4822 130 44568	TRS. BC557B	QP13044568
7412				
7413		4822 130 40959	TRS. BC547B	QP13040959
7414		4822 130 40959	TRS. BC547B	QP13040959
7415		4822 130 44568	TRS. BC557B	QP13044568
7416		4822 130 40959	TRS. BC547B	QP13040959
7417		4822 130 44568	TRS. BC557B	QP13044568
7418		4822 130 40959	TRS. BC547B	QP13040959
7419		4822 130 44568	TRS. BC557B	QP13044568
7420		4822 130 40959	TRS. BC547B	QP13040959
7421		4822 130 44568	TRS. BC557B	QP13044568
7422		4822 130 40959	TRS. BC547B	QP13040959
7423		4822 130 44568	TRS. BC557B	QP13044568
7424		4822 130 40959	TRS. BC547B	QP13040959
7425		4822 130 44568	TRS. BC557B	QP13044568
7426		4822 130 40959	TRS. BC547B	QP13040959
7427		4822 130 44568	TRS. BC557B	QP13044568
7428				
∫		4822 130 40959	TRS. BC547B	QP13040959
7431				
7432		4822 130 44568	TRS. BC557B	QP13044568
7433		4822 130 44568	TRS. BC557B	QP13044568
7434		4822 130 40959	TRS. BC547B	QP13040959
			MISCELLANEOUS	
1401		4822 276 13114	PUSH SWITCH TACT	QP27613114
1402		4822 276 13114	PUSH SWITCH TACT	QP27613114

POS. NO.	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
1403		4822 273 10336	ROTARY SWITCH REC.	QP27310336
1407		4822 267 51322	CONNECTOR 15P WIRE	QP26751322
5400		4822 242 72527	CER.RESONATOR 4.00MHz	QP24272527
5401		4822 156 21721	COIL 2.2μH ±10%	QP15621721
			ENCODER CIRCUIT BOARD	
			RESISTORS	
3497		4822 116 52175	100Ω ±5% 0.5W	QP11652175
3498		4822 116 52175	100Ω ±5% 0.5W	QP11652175
			MISCELLANEOUS	
1404		4822 273 10237	ROTARY SWITCH SOURCE	QP27310237
			TONE CIRCUIT BOARD	
			CAPACITORS	
2201		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
2202		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
2203		4822 124 12025	ELECT 470μF ±20% 35V	QP12412025
2204		4822 124 41329	ELECT2200μF ±20% 35V	QP12441329
2205		4822 124 12022	ELECT 220μF ±20% 25V	QP12412022
2206		4822 124 12022	ELECT 220μF ±20% 25V	QP12412022
2207		4822 124 12025	ELECT 470μF ±20% 35V	QP12412025
2208		4822 124 40257	ELECT 220μF ±20% 63V	QP12440257
2209		4822 124 12025	ELECT 470μF ±20% 35V	QP12412025
2210		4822 124 12025	ELECT 470μF ±20% 35V	QP12412025
▲2211		4822 126 12147	CER. 22nF ±10% Y5R 25V	QP12612147
2501		4822 124 81151	ELECT 22μF 50V	QP12481151
2502		4822 124 81151	ELECT 22μF 50V	QP12481151
2503		4822 122 33849	CER. 150pF ±10% Y5P 50V	QP12233849
2504		4822 122 33849	CER. 150pF ±10% Y5P 50V	QP12233849
2505		4822 124 12022	ELECT 220μF ±20% 25V	QP12412022
2506		4822 124 12022	ELECT 220μF ±20% 25V	QP12412022
2507		4822 121 41857	FILM 10nF ±5% 250V	QP12141857
2508		4822 121 41857	FILM 10nF ±5% 250V	QP12141857
2509		4822 126 10777	CER. 100pF 50V	QP12610777
2510		4822 126 10777	CER. 100pF 50V	QP12610777
▲2511		4822 124 40246	ELECT 4.7μF ±20% 63V	QP12440246
▲2512		4822 124 40246	ELECT 4.7μF ±20% 63V	QP12440246
2513		4822 121 51399	FILM 47nF ±10% 50V	QP12151399
2514		4822 121 51399	FILM 47nF ±10% 50V	QP12151399
2515		4822 124 12022	ELECT 220μF ±20% 25V	QP12412022
2516		4822 124 12022	ELECT 220μF ±20% 25V	QP12412022
2517		4822 124 40244	ELECT 2.2μF ±20% 63V	QP12440244
2518		4822 124 40244	ELECT 2.2μF ±20% 63V	QP12440244
2519		4822 121 10686	FILM 4.7nF ±10% 50V	QP12110686
2520		4822 121 10686	FILM 4.7nF ±10% 50V	QP12110686
▲2535		4822 122 33195	CER. 100pF ±10% 50V	QP12233195
▲2536		4822 122 33195	CER. 100pF ±10% 50V	QP12233195
			RESISTORS	
▲3203		4822 052 10479	47Ω ±5% 0.33W	QP05210479
3501		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3502		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3503		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3504		4822 116 52235	1MΩ ±5% 0.5W	QP11652235
3505		4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3506		4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3507		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3508		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3509		4822 116 52269	3.3kΩ ±5% 0.5W	QP11652269

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POS. NO.	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
3510		4822 116 52269	3.3kΩ ±5% 0.5W	QP11652269
3511		4822 101 11788	VARIABLE 10kΩ TONE	QP10111788
3512		4822 101 11788	VARIABLE 10kΩ TONE	QP10111788
⚠ 3513		4822 052 10479	47Ω ±5% 0.33W	QP05210479
⚠ 3514		4822 052 10479	47Ω ±5% 0.33W	QP05210479
3515		4822 116 52207	1.2kΩ ±5% 0.5W	QP11652207
3516		4822 116 52207	1.2kΩ ±5% 0.5W	QP11652207
3517		4822 116 52291	56kΩ ±5% 0.5W	QP11652291
3518		4822 116 52291	56kΩ ±5% 0.5W	QP11652291
3519		4822 116 52207	1.2kΩ ±5% 0.5W	QP11652207
3520		4822 116 52207	1.2kΩ ±5% 0.5W	QP11652207
3521		4822 116 52291	56kΩ ±5% 0.5W	QP11652291
3522		4822 116 52291	56kΩ ±5% 0.5W	QP11652291
⚠ 3523		4822 052 10479	47Ω ±5% 0.33W	QP05210479
⚠ 3524		4822 052 10479	47Ω ±5% 0.33W	QP05210479
3525		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3526		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3527		4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3528		4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3529		4822 101 30828	VARIABLE 100kΩ BALANCE	QP10130828
3537		4822 116 52269	3.3kΩ ±5% 0.5W	QP11652269
3538		4822 116 52269	3.3kΩ ±5% 0.5W	QP11652269
3539		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3540		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
			SEMICONDUCTORS	
6201				
∫		4822 130 31878	DIODE 1N4003G	QP13031878
6204				
7201		4822 209 12715	IC L7915CV	QP20912715
⚠ 7202		5322 209 71759	IC MCT7815CT	QQ20971759
7203		5322 130 44349	TRS. BC635	QQ13044349
7501		4822 209 73064	IC NJM2068DD	QP20973064
7502		4822 209 73064	IC NJM2068DD	QP20973064
7503		4822 209 73064	IC NJM2068DD	QP20973064
			MISCELLANEOUS	
1201		4822 071 55001	FUSE 500MA	QP07155001
1202		4822 071 55001	FUSE 500MA	QP07155001
1500		4822 276 13882	PUSH SWITCH DIRECT	QP27613882
			MAIN CIRCUIT BOARD	
			CAPACITORS	
2251		4822 124 12023	ELECT 47µF ±20% 25V	QP12412023
2252		4822 124 12023	ELECT 47µF ±20% 25V	QP12412023
⚠ 2253		4822 122 33197	CER. 1nF ±10% 50V	QP12233197
⚠ 2254		4822 122 33197	CER. 1nF ±10% 50V	QP12233197
2255		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2256		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2257	PM-68	4822 122 33519	CER. 470pF ±10% 50V	QP12233519
⚠ 2257	PM-78	4822 126 12339	CER. 2.2nF ±10% Y5R	QP12612339
2258	PM-68	4822 122 33519	CER. 470pF ±10% 50V	QP12233519
⚠ 2258	PM-78	4822 126 12339	CER. 2.2nF ±10% Y5R	QP12612339
2259	PM-68	4822 126 14164	CER. 10pF ±5% 500V	QP12614164
2259	PM-78	4822 126 11947	CER. 4.7pF ±5% 50V	QP12611947
2260	PM-68	4822 126 14164	CER. 10pF ±5% 500V	QP12614164
2260	PM-78	4822 126 11947	CER. 4.7pF ±5% 50V	QP12611947
2261	PM-68	4822 122 33519	CER. 470pF ±10% 50V	QP12233519
⚠ 2261	PM-78	4822 122 33197	CER. 1nF ±10% 50V	QP12233197
2262	PM-68	4822 122 33519	CER. 470pF ±10% 50V	QP12233519
⚠ 2262	PM-78	4822 122 33197	CER. 1nF ±10% 50V	QP12233197
2263	PM-68	4822 124 22572	ELECT 100µF ±20% 63V	QP12422572

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2263	PM-78	4822 124 40257	ELECT 220µF ±20% 63V	QP12440257
2264	PM-68	4822 124 22572	ELECT 100µF ±20% 63V	QP12422572
2264	PM-78	4822 124 40257	ELECT 220µF ±20% 63V	QP12440257
2265	PM-68	4822 124 22572	ELECT 100µF ±20% 63V	QP12422572
2265	PM-78	4822 124 40257	ELECT 220µF ±20% 63V	QP12440257
2266	PM-68	4822 124 22572	ELECT 100µF ±20% 63V	QP12422572
2266	PM-78	4822 124 40257	ELECT 220µF ±20% 63V	QP12440257
2267		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2268		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2269				
∫		5322 121 42386	FILM 100nF ±5% 63V	QQ12142386
2272				
2273				
∫		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
2276				
2283		4822 124 40242	ELECT 1µF ±20% 63V	QP12440242
			RESISTORS	
3251		4822 116 52176	10Ω ±5% 0.5W	QP11652176
3252		4822 116 52176	10Ω ±5% 0.5W	QP11652176
3253		4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3254		4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3255		4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3256		4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3257		4822 116 52264	27kΩ ±5% 0.5W	QP11652264
3258		4822 116 52264	27kΩ ±5% 0.5W	QP11652264
3259		4822 116 52213	180Ω ±5% 0.5W	QP11652213
3260		4822 116 52213	180Ω ±5% 0.5W	QP11652213
3261		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3262		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3263		4822 100 11213	TRIMMING 22kΩ ±30% 0.1W	QP10011213
3264		4822 100 11213	TRIMMING 22kΩ ±30% 0.1W	QP10011213
3265				
∫		4822 116 83872	220Ω ±5% 0.5W	QP11683872
3270				
3271		4822 116 52243	1.5kΩ ±5% 0.5W	QP11652243
3272		4822 116 52243	1.5kΩ ±5% 0.5W	QP11652243
3273		4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3274		4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3275		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3276		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3277	PM-68	4822 116 83872	220Ω ±5% 0.5W	QP11683872
3277	PM-78	4822 116 52228	680Ω ±5% 0.5W	QP11652228
3278	PM-68	4822 116 83872	220Ω ±5% 0.5W	QP11683872
3278	PM-78	4822 116 52228	680Ω ±5% 0.5W	QP11652228
3279				
∫		4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3284				
3285		4822 116 52264	27kΩ ±5% 0.5W	QP11652264
3286		4822 116 52264	27kΩ ±5% 0.5W	QP11652264
3287		4822 116 83868	150Ω ±5% 0.5W	QP11683868
3288		4822 116 83868	150Ω ±5% 0.5W	QP11683868
3289	PM-68	4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3289	PM-78	4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3290	PM-68	4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3290	PM-78	4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3291	PM-68	4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3291	PM-78	4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3292	PM-68	4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3292	PM-78	4822 116 83884	47kΩ ±5% 0.5W	QP11683884
3293		4822 116 83868	150Ω ±5% 0.5W	QP11683868
3294		4822 116 83868	150Ω ±5% 0.5W	QP11683868
⚠ 3295	PM-68	4822 052 10479	47Ω ±5% 0.33W	QP05210479

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▲ 3295	PM-78	4822 052 10109	10Ω ±5% 0.33W	QP05210109
▲ 3296	PM-68	4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲ 3296	PM-78	4822 052 10109	10Ω ±5% 0.33W	QP05210109
▲ 3297	PM-68	4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲ 3297	PM-78	4822 052 10109	10Ω ±5% 0.33W	QP05210109
▲ 3298	PM-68	4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲ 3298	PM-78	4822 052 10109	10Ω ±5% 0.33W	QP05210109
3299		4822 101 11787	TRIMMING 100Ω ±30% 0.1W	QP10111787
3300		4822 101 11787	TRIMMING 100Ω ±30% 0.1W	QP10111787
3301		4822 116 83876	270Ω ±5% 0.5W	QP11683876
3302		4822 116 83876	270Ω ±5% 0.5W	QP11683876
3303		4822 116 52207	1.2kΩ ±5% 0.5W	QP11652207
3304		4822 116 52207	1.2kΩ ±5% 0.5W	QP11652207
3305		4822 116 80176	1Ω ±5% 0.5W	QP11680176
3306		4822 116 80176	1Ω ±5% 0.5W	QP11680176
▲ 3309	PM-78	4822 100 20166	TRIMMING 10kΩ ±30% 0.1W	QP10020166
▲ 3310	PM-78	4822 100 20166	TRIMMING 10kΩ ±30% 0.1W	QP10020166
3311	PM-78	4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3312	PM-78	4822 050 11002	1kΩ ±1% 0.4W	QP05011002
▲ 3313				
∫		4822 052 10101	100Ω ±5% 0.33W	QP05210101
▲ 3316				
▲ 3317				
∫		4822 052 10681	680Ω ±5% 0.33W	QP05210681
▲ 3320				
▲ 3321				
∫		4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲ 3324		4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲ 3325		4822 052 10151	150Ω ±5% 0.33W	QP05210151
▲ 3326		4822 052 10151	150Ω ±5% 0.33W	QP05210151
▲ 3327				
∫		4822 052 10109	10Ω ±5% 0.33W	QP05210109
▲ 3334				
▲ 3335				
∫		4822 117 12344	0.18Ω x2 ±10% 3W	QP11712344
▲ 3338				
▲ 3339				
∫		4822 050 21002	1kΩ ±1% 0.6W	QP05021002
▲ 3342				
3343		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3344		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3345		4822 116 52289	5.6kΩ ±5% 0.5W	QP11652289
3346		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3347	PM-68	4822 116 52297	68kΩ ±5% 0.5W	QP11652297
3347	PM-78	4822 116 83882	39kΩ ±5% 0.5W	QP11683882
3348		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3349		4822 116 52297	68kΩ ±5% 0.5W	QP11652297
3350		4822 116 52297	68kΩ ±5% 0.5W	QP11652297
▲ 3351		4822 052 10221	220Ω ±5% 0.33W	QP05210221
▲ 3352		4822 052 10221	220Ω ±5% 0.33W	QP05210221
3353		4822 117 10814	10Ω ±5% 3W	QP11710814
3354		4822 117 10814	10Ω ±5% 3W	QP11710814
▲ 3355		4822 053 11331	330Ω ±5% 2W	QP05311331
▲ 3356		4822 053 11331	330Ω ±5% 2W	QP05311331
3369	PM-78	4822 050 11002	1kΩ ±1% 0.4W	QP05011002
3370	PM-78	4822 050 11002	1kΩ ±1% 0.4W	QP05011002
			SEMICONDUCTORS	
▲ 6251				
∫		4822 130 30621	DIODE 1N4148	QP13030621
▲ 6266				
6267				
∫		5322 130 34834	DIODE BZX79-C3V6	QQ13034834
6270				
▲ 6271		4822 130 30621	DIODE 1N4148	QP13030621
▲ 6272		4822 130 30621	DIODE 1N4148	QP13030621
6273				
∫		4822 130 30842	DIODE BAV21	QP13030842
6278				
▲ 6279		4822 130 30621	DIODE 1N4148	QP13030621
▲ 6280		4822 130 30621	DIODE 1N4148	QP13030621
▲ 6281		4822 130 30621	DIODE 1N4148	QP13030621
▲ 7251				
∫		4822 130 43233	TRS. 2SC2240GR	QP13043233
▲ 7256				
7257				
∫		4822 130 42949	TRS. 2SA970GR	QP13042949
7260				
▲ 7261		4822 130 43233	TRS. 2SC2240GR	QP13043233
▲ 7262		4822 130 43233	TRS. 2SC2240GR	QP13043233
7263		4822 130 61009	TRS. 2SC3423 O	QP13061009
7264		4822 130 61009	TRS. 2SC3423 O	QP13061009
7265		5322 130 61728	TRS. 2SA1360-Y	QQ13061728
7266		5322 130 61728	TRS. 2SA1360-Y	QQ13061728
▲ 7267		4822 130 60117	TRS. 2SC3419	QP13060117
▲ 7268		4822 130 60117	TRS. 2SC3419	QP13060117
▲ 7269	PM-78	4822 130 90347	OPT. UNIT PC817	HW10006320
▲ 7270	PM-78	4822 130 90347	OPT. UNIT PC817	HW10006320
7271		4822 130 41646	TRS. BF423	QP13041646
7272		4822 130 41646	TRS. BF423	QP13041646
7273		4822 130 41782	TRS. BF422	QP13041782
7274		4822 130 41782	TRS. BF422	QP13041782
▲ 7275		4822 130 63634	TRS. 2SA1837Y	QP13063634
▲ 7276		4822 130 63634	TRS. 2SA1837Y	QP13063634
▲ 7277		4822 130 10941	TRS. 2SC4793	QP13010941
▲ 7278		4822 130 10941	TRS. 2SC4793	QP13010941
▲ 7279	PM-68	4822 130 10942	TRS. 2SA1941	QP13010942
▲ 7279	PM-78	4822 130 10983	TRS. 2SA1962	QP13010983
▲ 7280	PM-68	4822 130 10942	TRS. 2SA1941	QP13010942
▲ 7280	PM-78	4822 130 10983	TRS. 2SA1962	QP13010983
▲ 7281	PM-68	4822 130 10943	TRS. 2SC5198	QP13010943
▲ 7281	PM-78	4822 130 10984	TRS. 2SC5242	QP13010984
▲ 7282	PM-68	4822 130 10943	TRS. 2SC5198	QP13010943
▲ 7282	PM-78	4822 130 10984	TRS. 2SC5242	QP13010984
▲ 7283	PM-68	4822 130 10942	TRS. 2SA1941	QP13010942
▲ 7283	PM-78	4822 130 10983	TRS. 2SA1962	QP13010983
▲ 7284	PM-68	4822 130 10942	TRS. 2SA1941	QP13010942
▲ 7284	PM-78	4822 130 10983	TRS. 2SA1962	QP13010983
▲ 7285	PM-68	4822 130 10943	TRS. 2SC5198	QP13010943
▲ 7285	PM-78	4822 130 10984	TRS. 2SC5242	QP13010984
▲ 7286	PM-68	4822 130 10943	TRS. 2SC5198	QP13010943
▲ 7286	PM-78	4822 130 10984	TRS. 2SC5242	QP13010984
▲ 7287		4822 130 43233	TRS. 2SC2240GR	QP13043233
▲ 7288		4822 130 43233	TRS. 2SC2240GR	QP13043233
7289		4822 130 42949	TRS. 2SA970GR	QP13042949
			MISCELLANEOUS	
1255		4822 265 11068	TERMINAL SPEAKER LEFT	QP26511068
1266		4822 265 11069	TERMINAL SPEAKER RIGHT	QP26511069
▲ 5268		4822 280 70354	RELAY VB-24MBU-510	QP28070354
▲ 5269		4822 280 70354	RELAY VB-24MBU-510	QP28070354
▲ 5270		4822 280 20501	RELAY MR62-24SR	QP28020501

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5351		4822 157 70599	COIL SPK.OUTPUT	QP15770599
5352		4822 157 70599	COIL SPK.OUTPUT	QP15770599
			SPK PROTECT CIRCUIT BOARD	
			CAPACITORS	
▲2277		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
▲2278		4822 124 40433	ELECT 47µF ±20% 25V	QP12440433
▲2279		4822 124 40433	ELECT 47µF ±20% 25V	QP12440433
2281		4822 124 40242	ELECT 1µF ±20% 63V	QP12440242
▲2282		4822 124 40433	ELECT 47µF ±20% 25V	QP12440433
			RESISTORS	
3357		4822 116 83884	47kΩ ±5% 0.5W	QP11683884
▲3358		4822 053 10103	10kΩ ±5% 1W	QP05310103
3360		4822 116 83874	220kΩ ±5% 0.5W	QP11683874
3361		4822 116 52271	33kΩ ±5% 0.5W	QP11652271
3362		4822 116 52291	56kΩ ±5% 0.5W	QP11652291
3364		4822 053 10223	22kΩ ±5% 1W	QP05310223
3365		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
			SEMICONDUCTOR	
▲7290		4822 209 83312	IC TA7317P	QP20983312
			SPK SW CIRCUIT BOARD	
			CAPACITORS	
2533		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
2534		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
			RESISTORS	
3530		4822 116 52256	2.2kΩ ±5% 0.5W	QP11652256
3531		4822 116 52256	2.2kΩ ±5% 0.5W	QP11652256
3532		4822 116 52257	22kΩ ±5% 0.5W	QP11652257
3533		4822 116 52176	10Ω ±5% 0.5W	QP11652176
3534		4822 116 52176	10Ω ±5% 0.5W	QP11652176
3535		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
			SEMICONDUCTORS	
▲6529		4822 130 30621	DIODE 1N4148	QP13030621
7529		4822 130 44283	TRS. BC636	QP13044283
7530		4822 130 44568	TRS. BC557B	QP13044568
			MISCELLANEOUS	
1506	PM-68	4822 276 13883	PUSH SWITCH SPESKERS	QP27613883
1507	PM-68	4822 276 13883	PUSH SWITCH SPESKERS	QP27613883
1506				
∫	PM-78	4822 276 13894	PUSH SWITCH SPEAKERS	QP27613894
1508				
1510	/02B,FB UBL	4822 267 31453	JACK HEADPHONE	QP26731453
1510	/02G FN	4822 265 11062	JACK HEADPHONE	QP26511062
			POWER CIRCUIT BOARD	
			CAPACITORS	
▲2201		4822 126 13332	CER. 10nF ±20% 400V	QP12613332
▲2202		4822 126 13332	CER. 10nF ±20% 400V	QP12613332
2204		5322 121 42498	FILM 680nF ±5% 63V	QQ12142498
2205		4822 124 12028	ELECT12000µF±20% 63V	QP12412028
2206		4822 124 12028	ELECT12000µF±20% 63V	QP12412028
2207	PM-78	4822 124 42391	ELECT 470µF ±20% 63V	QP12442391
2208	PM-78	4822 124 42391	ELECT 470µF ±20% 63V	QP12442391

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2209		4822 121 51319	FILM 1µF ±10% 63V	QP12151319
2210		4822 124 40242	ELECT 1µF ±20% 63V	QP12440242
2211		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
2212		4822 124 80141	ELECT 10nF ±10% 50V	QP12480141
2214		5322 121 42498	FILM 680nF ±5% 63V	QQ12142498
2302		4822 124 12022	ELECT 220µF ±20% 25V	QP12412022
2304		5322 124 22229	ELECT1000µF ±20% 35V	QQ12422229
▲2305		4822 124 40433	ELECT 47µF ±20% 25V	QP12440433
2401		4822 126 13325	CER. 100nF ±10% 16V	QP12613325
▲9211		4822 121 51387	FILM 10nF ±20% 16V	QP12151387
			RESISTORS	
3204		4822 050 26808	6.8Ω ±1% 0.6W	QP05026808
▲3207		4822 052 10108	1Ω ±5% 0.33W	QP05210108
▲3208		4822 052 10479	47Ω ±5% 0.33W	QP05210479
▲3209		4822 052 10479	47Ω ±5% 0.33W	QP05210479
3210		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3211		4822 116 52234	100kΩ ±5% 0.5W	QP11652234
3217	PM-78	4822 053 10229	22Ω ±5% 1W	QP05310229
3218	PM-78	4822 053 10229	22Ω ±5% 1W	QP05310229
			SEMICONDUCTORS	
▲6202		4822 130 30621	DIODE 1N4148	QP13030621
▲6204		4822 130 30621	DIODE 1N4148	QP13030621
▲6205		4822 130 10944	DIODE BRIDGE GBU6D	QP13010944
6206				
∫	PM-78	4822 130 31878	DIODE 1N4003G	QP13031878
6209				
6210				
∫		4822 130 31878	DIODE 1N4003G	QP13031878
6216				
▲6302		4822 130 30621	DIODE 1N4148	QP13030621
▲7302		4822 209 80817	IC L7805CV	QP20980817
			MISCELLANNEOUS	
▲1201		4822 276 12924	PUSH SWITCH,POWER	QP27612924
▲1205		4822 070 32502	FUSE T2.5A 250V	QP07032502
▲1206	/02	4822 265 11009	MAINS OUTLET	QP26511009
▲1206	F,U	4822 265 11081	MAINS OUTLET	QP26511081
▲1209	/02	4822 070 33152	FUSE T3.15A 250V	QP07033152
▲1209	F,U	4822 070 36302	FUSE T6.3A 250V	QP07036302
▲1213	PM-78	4822 071 54002	FUSE T4A 250V	QP07154002
▲1214	PM-78	4822 071 54002	FUSE T4A 250V	QP07154002
▲1215		4822 071 55001	FUSE T500MA 250V	QP07155001
▲1216	PM-78	4822 071 55001	FUSE T500MA 250V	QP07155001
1401		4822 265 10651	TERMINAL 2P RCA JACK	QP26510651
5202		4822 280 10337	RELAY VS-12MB-NR 1P-12V	QP28010337
5204	PM-78	4822 280 10344	RELAY LY2-0-DC24	QP28010344
▲5205	/02	4822 146 10828	TRANSF.EI35-20T	QP14610828
▲5205	F,U	4822 146 10861	TRANSF.EI35-20T	QP14610861